

EXHIBIT HH

Stephanie Benight, Ph.D.

Page 1

IN THE UNITED STATES DISTRICT COURT
FOR THE SOUTHERN DISTRICT OF WEST VIRGINIA
CHARLESTON DIVISION

IN RE: ETHICON, INC.,)	
PELVIC REPAIR SYSTEM)	
PRODUCTS LIABILITY	)	Master File No.
LITIGATION	)	2:12-MD-02327
	)	MDL 2327
)	
)	
	)	JOSEPH R. GOODWIN
	)	U.S. DISTRICT JUDGE
THIS DOCUMENT RELATES TO:)	
THE CASES LISTED BELOW)	
)	
)	
Mullins, et al. v.	)	2:12-cv-02952
Ethicon, Inc., et al.)	
)	
Sprout, et al. v.	)	2:12-cv-07924
Ethicon, Inc., et al.)	
)	
Iquinto v. Ethicon, Inc.,	)	2:12-cv-09765
et al.)	
)	
Daniel, et al. v.	)	2:13-cv-02565
Ethicon, Inc., et al.)	
)	
Dillon, et al. v.	)	2:13-cv-02919
Ethicon, Inc., et al.)	
)	
Webb, et al. v. Ethicon,	)	2:13-cv-04517
Inc., et al.)	
)	
Martinez v. Ethicon,	)	2:13-cv-04730
Inc., et al.)	
)	
McIntyre, et al. v.	)	2:13-cv-07283
Ethicon, Inc., et al.)	

VIDEOTAPED DEPOSITION OF STEPHANIE BENIGHT, Ph.D.
Tuesday, October 13, 2015, 11:45 a.m.

Stephanie Benight, Ph.D.

Page 2	Page 4
<p>1 Oxley v. Ethicon, Inc.,) 2:13-cv-10150 et al.) 2) 3 Atkins, et al. v.) 2:13-cv-11022 Ethicon, Inc., et al.) 4) 5 Garcia v. Ethicon, Inc.,) 2:13-cv-14355 et al.) 6) 7 Lowe v. Ethicon, Inc., et) 2:13-cv-14718 al.) 8) 9 Dameron, et al. v.) 2:13-cv-14799 Ethicon, Inc., et al.) 10) 11 Vanbuskir, et al., v.) 2:13-cv-16183 Ethicon, Inc., et al.) 12) 13 Mullens, et al. v.) 2:13-cv-16564 Ethicon, Inc., et al.) 14) 15 Shears, et al. v.) 2:13-cv-17012 Ethicon, Inc., et al.) 16) 17 Javins, et al., v.) 2:13-cv-18479 Ethicon, Inc., et al.) 18) 19 Barr, et al. v. Ethicon,) 2:13-cv-22606 Inc., et al.) 20) 21 Lambert v. Ethicon, Inc.,) 2:13-cv-24393 et al.) 22) 23 Cook v. Ethicon, Inc., et) 2:13-cv-29260 al.) 24) 25 Stevens v. Ethicon, Inc.,) 2:13-cv-29918 et al.) 26) 27 Harmon v. Ethicon, Inc.,) 2:13-cv-31818 et al.) 28) 29 Snodgrass v. Ethicon,) 2:13-cv-31881 Inc., et al.) 30) 31 Miller v. Ethicon, et al.) 2:13-cv-32627 32) 33) 34) 35)</p>	<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p>-----</p> <p>DEPOSITION OF STEPHANIE BENIGHT, Ph.D.</p> <p>Held at the Offices of Regus Palo Alto 530 Lytton Avenue, California Tuesday, October 13, 2015, 11:45 a.m.</p> <p>-----</p> <p>REPORTED BY: ELAINA BULDA-JONES, CSR #11720</p>
Page 3	Page 5
<p>1 Matney, et al. v.) 2:14-cv-09195 Ethicon, Inc., et al.) 2) 3 Jones, et al. v. Ethicon,) 2:14-cv-09517 Inc., et al.) 4) 5 Humbert v. Ethicon, Inc.,) 2:14-cv-10640 et al.) 6) 7 Gillum, et al. v.) 2:14-cv-12756 Ethicon, Inc., et al.) 8) 9 Whisner, et al. v.) 2:14-cv-13023 Ethicon, Inc., et al.) 10) 11 Tomblin v. Ethicon, Inc.,) 2:14-cv-14664 et al.) 12) 13 Scheppleng v. Ethicon,) 2:14-cv-16061 Inc., et al.) 14) 15 Tyler, et al. v. Ethicon,) 2:14-cv-19110 Inc., et al.) 16) 17 Kelly, et al. v. Ethicon,) 2:14-cv-22079 Inc., et al.) 18) 19 Lundell v. Ethicon, Inc.,) 2:14-cv-24911 et al.) 20) 21) 22) 23) 24) 25)</p> <p>Cheshire, et al. v.) 2:14-cv-24999 Ethicon, Inc., et al.) Burgoyne, et al. v.) 2:14-cv-28620 Ethicon, Inc., et al.) Bennett, et al. v.) 2:14-cv-29624 Ethicon, Inc., et al.)</p>	<p>1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25</p> <p>APPEARANCES</p> <p>For the Plaintiffs: Aylstock, Witkin, Kreis & Overholtz 17 East Main Street, Suite 200 Pensacola, Florida 32502 BY: DANIEL THORNBURGH, ESQ. BY: SAMANTHA KATEN 850.202.1010 Dthornburgh@awkolaw.com (PRESENT TELEPHONICALLY)</p> <p>For the Defendants: Butler Snow, LLP 1020 Highland Colony Parkway, Suite 1400 Ridgeland, Mississippi 39157 BY: CHAD R. HUTCHINSON, ESQ. 601.985.4401 Chad.hutchinson@butlersnow.com</p> <p>Also present: Steve Patapoff, videographer</p>

2 (Pages 2 to 5)

Stephanie Benight, Ph.D.

Page 6

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7

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INDEX OF EXAMINATIONS

EXAMINATIONS

MR. THORNBURGH

MR. HUTCHINSON

MR. THORNBURGH

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3 (Pages 6 to 9)

Stephanie Benight, Ph.D.

Page 10	Page 12
<p>1 A. Okay.</p> <p>2 Q. And you are here today to provide</p> <p>3 deposition testimony related to some experiments</p> <p>4 that you worked on as an employee of Exponent in</p> <p>5 collaboration with Dr. MacLean, who was named by</p> <p>6 Ethicon and Johnson & Johnson as an expert in this</p> <p>7 case; is that -- is my understanding correct?</p> <p>8 A. That's my understanding.</p> <p>9 MR. HUTCHINSON: Dan, stop for just one</p> <p>10 second.</p> <p>11 (Whereupon, a brief discussion off the</p> <p>12 record.)</p> <p>13 MR. HUTCHINSON: My computer was not doing</p> <p>14 realtime, but we have it fixed now. Sorry about</p> <p>15 that.</p> <p>16 MR. THORNBURGH: Okay. Okay. All right.</p> <p>17 You can see the technical problems are everywhere</p> <p>18 today.</p> <p>19 MR. HUTCHINSON: Not just on your end,</p> <p>20 huh?</p> <p>21 MR. THORNBURGH: You know what, it's not</p> <p>22 on my end, actually, it's on the other end, because</p> <p>23 you guys can see us and hear us, but we can't see or</p> <p>24 hear you. So the -- it's got to be on that end.</p> <p>25 MR. HUTCHINSON: Actually, no -- actually,</p>	<p>1 A. Okay.</p> <p>2 Q. Okay. So let's try not to speak over each</p> <p>3 other, all right?</p> <p>4 A. Okay.</p> <p>5 Q. So when I'm talking, I'll try to refrain</p> <p>6 from asking another question, and I ask that if I'm</p> <p>7 asking you a question, that you refrain from</p> <p>8 answering the question until I'm finished with my</p> <p>9 question, okay?</p> <p>10 A. Okay.</p> <p>11 Q. And you are doing a good job so far.</p> <p>12 Speak audibly, with a -- you know, a "yes"</p> <p>13 or a "no." Don't shake your head yes or no because</p> <p>14 the court reporter can't document that accurately or</p> <p>15 completely, okay?</p> <p>16 A. I understand.</p> <p>17 Q. If you answer a question, I'm going to</p> <p>18 assume that you understand the question, okay?</p> <p>19 A. Okay.</p> <p>20 Q. If you don't understand a question, make</p> <p>21 sure that you ask me -- or ask me to rephrase it.</p> <p>22 Otherwise, if you answer it, I'm going to just</p> <p>23 assume that you understood and we're going to move</p> <p>24 forward to the next question --</p> <p>25 A. Okay.</p>
Page 11	Page 13
<p>1 no, we cannot see -- we cannot see you guys either.</p> <p>2 We can only hear you on the speakerphone.</p> <p>3 MR. THORNBURGH: Okay. Well -- okay.</p> <p>4 Okay. Well, whatever the case may be, there is</p> <p>5 technical problems. We'll figure that out later on.</p> <p>6 But let's get going.</p> <p>7 Q. Dr. Benight, have you given a deposition</p> <p>8 prior to today?</p> <p>9 A. No.</p> <p>10 Q. Okay. I imagine you are a little bit</p> <p>11 nervous?</p> <p>12 MR. HUTCHINSON: Object to form.</p> <p>13 BY MR. THORNBURGH:</p> <p>14 Q. I think it's natural to be a little</p> <p>15 anxious and nervous about a deposition.</p> <p>16 Are you a little bit nervous and anxious</p> <p>17 about your deposition today?</p> <p>18 MR. HUTCHINSON: The same objection.</p> <p>19 You can answer.</p> <p>20 THE WITNESS: No, sir.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. Okay. Well, let me give you -- let me</p> <p>23 just explain some of the deposition rules so that we</p> <p>24 can try to get a clean record and make the court</p> <p>25 reporter's job a little bit easier, okay.</p>	<p>1 Q. -- okay?</p> <p>2 If you need a break at any time, just let</p> <p>3 me know, okay?</p> <p>4 A. Okay.</p> <p>5 Q. We'll -- it's not a marathon, so we'll</p> <p>6 take a break any time you need a break.</p> <p>7 The only caveat to that instruction is if</p> <p>8 I have a question pending, I ask that you answer the</p> <p>9 question that is pending before you ask for a break,</p> <p>10 okay?</p> <p>11 A. Okay.</p> <p>12 Q. Now, I don't want to spend too much time</p> <p>13 going over your background, training and experience,</p> <p>14 but let's talk just briefly about your educational</p> <p>15 background.</p> <p>16 I understand that you went to the</p> <p>17 University of Washington for school; is that</p> <p>18 correct?</p> <p>19 A. I have a Ph.D. degree in chemistry from</p> <p>20 the University of Washington.</p> <p>21 Q. Okay. And I think you also have an</p> <p>22 undergraduate chemistry degree, too; is that</p> <p>23 correct?</p> <p>24 A. I have a bachelor's of science degree in</p> <p>25 chemistry from Stanford University.</p>

4 (Pages 10 to 13)

Stephanie Benight, Ph.D.

Page 14	Page 16
<p>1 Q. Okay. And then you went back to Stanford</p> <p>2 University after you received your Ph.D. from</p> <p>3 Washington University and got another degree; is</p> <p>4 that correct?</p> <p>5 A. I completed two years of postdoctoral</p> <p>6 training. There is no degree associated with that</p> <p>7 training, but yes, that was at Stanford.</p> <p>8 Q. Okay. And just talk a little bit about</p> <p>9 your work experience.</p> <p>10 I -- my understanding from looking, I</p> <p>11 think, at your resumé on the Exponent website is</p> <p>12 that you -- or maybe just some research on the</p> <p>13 internet, but you worked for Dalton Research Group</p> <p>14 at the University of Washington; is that accurate?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. And after you finished your</p> <p>17 postdoctorate degree -- or postdoctorate work at</p> <p>18 Stanford, what did you do in terms of work and</p> <p>19 employment?</p> <p>20 A. I started working at Exponent.</p> <p>21 Q. Okay. And how long have you been at</p> <p>22 Exponent?</p> <p>23 A. A little over a year and a half.</p> <p>24 Q. Now, let me ask you some questions, just</p> <p>25 some general questions before I get into the</p>	<p>1 A. I learned to record experiments in my</p> <p>2 undergraduate and graduate work.</p> <p>3 Q. In a laboratory notebook or a research</p> <p>4 notebook, right?</p> <p>5 A. I --</p> <p>6 MR. HUTCHINSON: Object to form.</p> <p>7 THE WITNESS: I learned to keep a record</p> <p>8 of the experiments performed during those studies.</p> <p>9 BY MR. THORNBURGH:</p> <p>10 Q. Do you agree with me that a lab notebook</p> <p>11 is intended to ensure the quality and integrity of</p> <p>12 data generated during the scientific experiment?</p> <p>13 MR. HUTCHINSON: Object to form.</p> <p>14 THE WITNESS: A lab notebook is a record</p> <p>15 of the experiments performed for that particular</p> <p>16 project.</p> <p>17 BY MR. THORNBURGH:</p> <p>18 Q. And the -- and the -- and the intended</p> <p>19 purpose is to ensure that the -- is to ensure the</p> <p>20 quality and integrity of the data generated during</p> <p>21 that scientific experiment, correct?</p> <p>22 A. It's meant to be a recording of the</p> <p>23 experiments performed so that someone else can</p> <p>24 repeat the work.</p> <p>25 Q. And a lab notebook documents the research</p>
Page 15	Page 17
<p>1 specifics of your involvement in the experiments</p> <p>2 that you performed at Exponent in this case.</p> <p>3 Is it fair to say -- I did some research</p> <p>4 of you on the internet, and I noticed that you</p> <p>5 worked at Dalton labs and -- during -- well, let</p> <p>6 me -- strike that.</p> <p>7 Isn't it -- is it accurate to say that at</p> <p>8 Dalton labs you were required to maintain a lab</p> <p>9 notebook to document all research and experiments</p> <p>10 that were being performed at Dalton Research Group?</p> <p>11 A. While I worked in Larry Dalton's group, I</p> <p>12 kept a record of all the experiments performed in a</p> <p>13 lab notebook.</p> <p>14 Q. Okay. And that was something you learned,</p> <p>15 going back to your undergraduate and graduate</p> <p>16 studies, is recording your own results or your</p> <p>17 experiments and the data from those experiments and</p> <p>18 the steps and processes taken during those</p> <p>19 experience -- experiments in a lab notebook,</p> <p>20 correct?</p> <p>21 A. That was the process for the Dalton</p> <p>22 Research Group at the time.</p> <p>23 Q. All right. And that's the process that</p> <p>24 you actually learned to undertake in your</p> <p>25 undergraduate and graduate studies as well, correct?</p>	<p>1 that has been conducted during the experiment,</p> <p>2 correct?</p> <p>3 A. Yes.</p> <p>4 Q. And do you agree with me that a lab</p> <p>5 notebook ensures that the work that is done is done</p> <p>6 in accordance with agreed-upon procedures,</p> <p>7 protocols, and controls of the experiment?</p> <p>8 A. Work recorded as part of the experiments</p> <p>9 performed in the lab notebook is that, it's a record</p> <p>10 of the experiments performed as part of a project.</p> <p>11 Q. Right. And before that project or</p> <p>12 experiment starts, certain protocols, procedures,</p> <p>13 and controls are put into place, correct?</p> <p>14 A. It depends on the work being performed.</p> <p>15 Q. Okay. Well, when would -- prior to an</p> <p>16 experiment being done, what type of work would a --</p> <p>17 would you receive a -- strike that.</p> <p>18 Let me -- I'll withdraw that question.</p> <p>19 You said it -- it depends on the type of</p> <p>20 work being performed.</p> <p>21 What do you mean by that?</p> <p>22 A. If you are doing an experiment, you record</p> <p>23 the process for that experiment in a record of the</p> <p>24 experiment. You keep a record of it.</p> <p>25 Q. Right. And -- right. And by "process,"</p>

5 (Pages 14 to 17)

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 18</p> <p>1 that's the protocols that are established before the</p> <p>2 experiment is started, correct?</p> <p>3 A. It depends on the experiment.</p> <p>4 Q. Okay. What do you mean by that?</p> <p>5 A. For example, in graduate school, I</p> <p>6 synthesized a compound. I would write the reaction</p> <p>7 down in a laboratory notebook prior to starting the</p> <p>8 reaction.</p> <p>9 Q. Yeah, but -- but I'm not talking about the</p> <p>10 lab notebook anymore. So I apologize if my question</p> <p>11 wasn't clear.</p> <p>12 My question is, before the experiment gets</p> <p>13 started --</p> <p>14 A. Well, you are breaking up a little bit.</p> <p>15 Q. Yeah. So let me -- let me try this again.</p> <p>16 Can you hear me better now?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. So I am -- I am trying to make sure</p> <p>19 that you understand my question.</p> <p>20 Generally speaking, when you intend to</p> <p>21 conduct some sort of experiment, is it true that</p> <p>22 there are written protocols that are followed</p> <p>23 throughout the -- throughout the experiment that is</p> <p>24 being conducted?</p> <p>25 MR. HUTCHINSON: Object to form.</p>	<p style="text-align: right;">Page 20</p> <p>1 regarding a protocol that should be followed in the</p> <p>2 UV photooxidation phase of your experiment?</p> <p>3 A. A QUV is a common way to induce changes in</p> <p>4 polymers, including oxidation. There are hundreds</p> <p>5 of papers on the subject, and so in a fundamental</p> <p>6 perspective, we followed that.</p> <p>7 Q. Okay. So listen to my question, because</p> <p>8 I'm trying to make it really simple and clear.</p> <p>9 Before you started the QUV experiment that</p> <p>10 we're going to talk to in more detail in a moment,</p> <p>11 were you provided with a written protocol that you</p> <p>12 were to follow?</p> <p>13 MR. HUTCHINSON: Object to form and asked</p> <p>14 and answered.</p> <p>15 Dan, just so you'll know, the -- there is</p> <p>16 something coming up on the screen. Are you guys</p> <p>17 trying to call in again?</p> <p>18 MR. THORNBURGH: I don't see that from my</p> <p>19 end, but somebody might on that end. I don't know.</p> <p>20 My screen is blank. It's not even on.</p> <p>21 MR. HUTCHINSON: Okay. So you all aren't</p> <p>22 trying to call in anymore; is that right?</p> <p>23 MR. THORNBURGH: That's right.</p> <p>24 MR. HUTCHINSON: Okay.</p> <p>25</p>
<p style="text-align: right;">Page 19</p> <p>1 THE WITNESS: When you conduct an</p> <p>2 experiment, you want to keep a record of the</p> <p>3 experiment that is performed.</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. But my question is, before the -- before</p> <p>6 the record -- or before the experiment is started</p> <p>7 and before you are keeping a record, in your lab</p> <p>8 notebook or elsewhere, isn't it true that you begin</p> <p>9 a study with a study protocol?</p> <p>10 A. It depends on the experiment being</p> <p>11 performed.</p> <p>12 Q. Let me -- let me -- let me ask you this</p> <p>13 question.</p> <p>14 Before you began the experiment in this</p> <p>15 case, were you provided with a written protocol?</p> <p>16 A. We followed the protocols of the</p> <p>17 plaintiffs' experts, Dr. Guelcher and Dr. Iakovlev,</p> <p>18 in the performance of these experiments.</p> <p>19 Q. Well, but neither one of those experts</p> <p>20 performed UV photooxidation, correct?</p> <p>21 A. We performed a simple set of control</p> <p>22 experiments that the plaintiffs' experts did not in</p> <p>23 this study.</p> <p>24 Q. Right. And so was there a written</p> <p>25 protocol on -- prior to beginning the experiment</p>	<p style="text-align: right;">Page 21</p> <p>1 BY MR. THORNBURGH:</p> <p>2 Q. So, Doctor, sorry for the interruption.</p> <p>3 I'm going to try to make this very simple.</p> <p>4 My question to you is, before the QUV</p> <p>5 procedure was conducted, were you provided with a</p> <p>6 written protocol that you were supposed to follow?</p> <p>7 A. A QUV a common way to induce changes in</p> <p>8 polymers, including oxidation, and we followed the</p> <p>9 hundreds of literature articles that covered that.</p> <p>10 Q. Okay. So you were not provided with a</p> <p>11 written protocol, correct?</p> <p>12 MR. HUTCHINSON: Objection. Been asked</p> <p>13 and answered, Counsel. Move on.</p> <p>14 MR. THORNBURGH: It's a simple question.</p> <p>15 MR. HUTCHINSON: Well, she's answered it.</p> <p>16 MR. THORNBURGH: Excuse me. Excuse me.</p> <p>17 Q. Dr. Benight, did Dr. MacLean or anybody</p> <p>18 else from Exponent provide you with a written</p> <p>19 protocol regarding the QUV procedure?</p> <p>20 MR. HUTCHINSON: Same objection.</p> <p>21 You can answer, Dr. -- Dr. Benight, if you</p> <p>22 can.</p> <p>23 THE WITNESS: We followed a protocol that</p> <p>24 is in hundreds of literature papers on QUV, which is</p> <p>25 a common way to induce changes in polymers,</p>

6 (Pages 18 to 21)

Stephanie Benight, Ph.D.

Page 22	Page 24
<p>1 including oxidation.</p> <p>2 BY MR. THORNBURGH:</p> <p>3 Q. Okay. So you weren't provided with a</p> <p>4 written protocol that synthesized those hundreds of</p> <p>5 peer-reviewed publications regarding protocols to</p> <p>6 follow for QUV photooxidation, correct?</p> <p>7 MR. HUTCHINSON: Same objection.</p> <p>8 THE WITNESS: Can you repeat the question?</p> <p>9 MR. THORNBURGH: Madam Court Reporter, can</p> <p>10 you read back the question, please?</p> <p>11 (Whereupon, the reporter read the record</p> <p>12 as follows:</p> <p>13 "Question: Okay. So you weren't provided</p> <p>14 with a written protocol that synthesized those</p> <p>15 hundreds of peer-reviewed publications regarding</p> <p>16 protocols to follow for QUV photooxidation,</p> <p>17 correct?")</p> <p>18 THE WITNESS: For a specific protocol, we</p> <p>19 followed the protocol of Dr. Reitman, et al., given</p> <p>20 in a conference presentation.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. Okay. And Dr. Reitman is another</p> <p>23 scientist at Exponent who has been retained by</p> <p>24 Butler Snow and other law firms to represent -- or</p> <p>25 to serve as an expert in mesh litigation; is that</p>	<p>1 MR. HUTCHINSON: -- what she followed.</p> <p>2 MR. THORNBURGH: Chad, Chad, your</p> <p>3 objection is noted. I would prefer that you don't</p> <p>4 speak, and that's part of the rules here.</p> <p>5 Q. Doctor, is it -- I'm just trying to</p> <p>6 understand your testimony.</p> <p>7 Is it your testimony that you followed the</p> <p>8 protocol regarding QUV photooxidation of synthetic</p> <p>9 polypropylene meshes that was prepared and presented</p> <p>10 by Dr. Reitman at a conference?</p> <p>11 A. Well, we followed hundreds of literature</p> <p>12 articles that recount QUV exposure as a way to</p> <p>13 induce changes in polymers, including oxidation.</p> <p>14 As for a specific -- what you are</p> <p>15 referring to as protocol, I -- we used that of</p> <p>16 Dr. Reitman, et al., in a conference presentation.</p> <p>17 Q. Okay. Was Dr. Reitman's protocol provided</p> <p>18 to you as the written protocol that should be</p> <p>19 followed in your experiment using QUV radiation in</p> <p>20 this case?</p> <p>21 A. That is the specific conditions that we</p> <p>22 used.</p> <p>23 Q. Okay. And when was that protocol provided</p> <p>24 to you?</p> <p>25 A. I don't recall.</p>
Page 23	Page 25
<p>1 your understanding?</p> <p>2 MR. HUTCHINSON: Object to form. Dan,</p> <p>3 that mischaracterizes the evidence.</p> <p>4 THE WITNESS: Dr. Reitman is also an</p> <p>5 employee at Exponent.</p> <p>6 BY MR. THORNBURGH:</p> <p>7 Q. Correct. And you understand that</p> <p>8 Dr. Reitman has been named as an expert in the mesh</p> <p>9 litigation on behalf of defendants, correct?</p> <p>10 A. I don't know about that information.</p> <p>11 Q. Okay. So let's go back to your answer a</p> <p>12 few moments ago.</p> <p>13 You testified that Dr. -- that you</p> <p>14 followed the protocol that was discussed by</p> <p>15 Dr. Reitman at a -- some sort of conference; is that</p> <p>16 correct?</p> <p>17 MR. HUTCHINSON: Same objection. Counsel,</p> <p>18 this has been asked and answered. She's testified</p> <p>19 already what she has followed.</p> <p>20 MR. THORNBURGH: Excuse me, Chad, I -- if</p> <p>21 you want to object, just object.</p> <p>22 MR. HUTCHINSON: Okay. Please note my</p> <p>23 objection for the record. She's already</p> <p>24 testified --</p> <p>25 MR. THORNBURGH: All right.</p>	<p>1 Q. Did you receive it via e-mail from</p> <p>2 Dr. MacLean, or how did that -- how did you receive</p> <p>3 that?</p> <p>4 A. I believe that it was a conference</p> <p>5 presentation given by Dr. Reitman.</p> <p>6 Q. Okay. So you went to the lab and you were</p> <p>7 recalling the procedures and the protocol that was</p> <p>8 established by Dr. Reitman during a prior</p> <p>9 conference --</p> <p>10 A. Yes.</p> <p>11 Q. -- is that correct?</p> <p>12 And so you didn't have in front of you</p> <p>13 Dr. Reitman's written procedures regarding QUV, it</p> <p>14 was based on your recollection of the protocol that</p> <p>15 ought to be followed while using QUV to -- to</p> <p>16 intentionally oxidize synthetic polypropylene mesh?</p> <p>17 MR. HUTCHINSON: Objection. Counsel, you</p> <p>18 have asked the same question in a roundabout way</p> <p>19 literally ten times now. The witness has already</p> <p>20 told you what they followed.</p> <p>21 MR. THORNBURGH: Okay.</p> <p>22 Q. So when was that conference given,</p> <p>23 approximately?</p> <p>24 A. I believe in -- I don't know the exact</p> <p>25 year. Probably in 2013.</p>

Stephanie Benight, Ph.D.

Page 26	Page 28
<p>1 Q. So approximately two years before your 2 experiment in this case?</p> <p>3 A. That's correct.</p> <p>4 Q. Okay. And you don't have a copy of the 5 protocol that was discussed by Dr. Reitman in your 6 possession today, correct?</p> <p>7 A. The protocol is given in Dr. MacLean's 8 expert report.</p> <p>9 Q. Well, but my question is, what -- so let 10 me back up a little bit. We'll get to it -- we'll 11 get to -- we'll come back to this question later on, 12 I think -- actually, this topic later on. Let's 13 move on and talk about some other issues.</p> <p>14 Doctor, when you -- let me ask you this 15 question.</p> <p>16 Do you agree that maintaining a lab 17 notebook documenting the experiments performed helps 18 in the event that your data may have to be explained 19 or defended or reconstructed or repeated without 20 your assistance by some other person?</p> <p>21 A. Keeping a record of the experiments 22 performed is important so that another reasonable 23 scientist can repeat the work.</p> <p>24 Q. So a lab notebook allows others -- if I 25 understand your testimony correctly, others to</p>	<p>1 doctors who have -- who have provided testimony or 2 have done experiments on behalf of Exponent in this 3 litigation who have -- who have maintained a lab 4 notebook that was provided to that scientist from 5 Exponent to record their experience -- their 6 experiment.</p> <p>7 Were you provided with an 8 Exponent-specific lab notebook to use in this case?</p> <p>9 MR. HUTCHINSON: Object to form.</p> <p>10 THE WITNESS: It sounds like you are 11 referring to their own process. I kept a record of 12 all the experiments performed on Exponent's servers. 13 BY MR. THORNBURGH:</p> <p>14 Q. Okay. So you didn't use -- strike that. 15 When you were in your undergraduate -- 16 strike that.</p> <p>17 When you were at -- working at Dalton -- 18 when you were working at Dalton Research Group at 19 the University of Washington, do you agree that a 20 lab notebook should be written as a diary, where all 21 the information about the work is recorded as it is 22 done, contemporaneous with the experiment that you 23 are performing?</p> <p>24 MR. HUTCHINSON: Object to form. 25 THE WITNESS: That was part of the process</p>
Page 27	Page 29
<p>1 understand what you did in your experiment and -- so 2 that they can repeat or -- or attempt to reproduce 3 your results in their own study; is that accurate?</p> <p>4 A. A record of experiments performed serves 5 that purpose.</p> <p>6 Q. Okay. So you seem to be distinguishing 7 from a lab notebook and a record of the experiment 8 performed.</p> <p>9 Did you not keep a lab notebook in this 10 case?</p> <p>11 A. I kept a record of all of the experiments 12 performed, and that's been provided to you 13 electronically.</p> <p>14 Q. Okay. But you didn't have -- you didn't 15 use the Exponent lab notebook to record your data 16 and the steps that you took during your experiment 17 in a notebook that is designated for research, 18 correct?</p> <p>19 MR. HUTCHINSON: Object to form.</p> <p>20 MR. THORNBURGH: Let me ask -- let me ask 21 that question better.</p> <p>22 Q. Doctor, I have taken other Exponent 23 scientists' depositions before today, so you are not 24 my first Exponent witness.</p> <p>25 And I have taken, you know, several</p>	<p>1 for that lab, keeping a record of the experiments 2 performed.</p> <p>3 BY MR. THORNBURGH:</p> <p>4 Q. You used a different process in this 5 experiment than the process of recordkeeping and lab 6 notebook recording that you used when you worked for 7 Dalton Research Group, correct?</p> <p>8 A. For these set of experiments that are the 9 basis for Dr. MacLean's report, I kept a record of 10 the experiments performed electronically. It's an 11 electronic lab notebook.</p> <p>12 Q. Okay. So where is your electronic lab 13 notebook?</p> <p>14 A. That's been provided to you 15 electronically.</p> <p>16 Q. Well, how would I identify what your -- or 17 where your electronic lab notebook is within the 18 production of documents that were provided to me?</p> <p>19 A. I can point those out to you, sir, if you 20 would like.</p> <p>21 Q. Okay. So let me -- let me try to 22 understand.</p> <p>23 So what are you representing to this Court 24 was the lab -- electronic lab notebook that you kept 25 contemporaneous with the study that you performed in</p>

8 (Pages 26 to 29)

Stephanie Benight, Ph.D.

Page 30	Page 32
<p>1 this case?</p> <p>2 A. I can point out those documents to you</p> <p>3 within the production.</p> <p>4 MR. THORNBURGH: Madam Court Reporter, can</p> <p>5 you find the document that was in the index as</p> <p>6 Number 4? It's the -- it's the grid.</p> <p>7 (Whereupon, a brief discussion off the</p> <p>8 record.)</p> <p>9 MR. THORNBURGH: Well, we're going to</p> <p>10 finish -- we'll finish this line of questioning,</p> <p>11 Chad, and then I'll -- I'll do it as quick as I can,</p> <p>12 but I probably have a few questions just to finish</p> <p>13 this line of questioning, and then I'll let you --</p> <p>14 we'll take a break.</p> <p>15 THE WITNESS: Is there a question?</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. Yeah, my -- you had indicated that you</p> <p>18 kept an electronic lab notebook within the Exponent</p> <p>19 databases, or at least some sort of electronic</p> <p>20 notebook, and I asked you to point out where those</p> <p>21 notebooks are.</p> <p>22 And rather than go through the entire</p> <p>23 production, I'm going to direct you to a couple</p> <p>24 documents and ask you if certain documents are the</p> <p>25 documents that you are alleging are your electronic</p>	<p>1 MR. THORNBURGH: Well, I assume that the</p> <p>2 court reporter has some exhibit stickers. And so we</p> <p>3 keep this in -- sort of do this in organized</p> <p>4 fashion, I'm going to ask that she re-mark that</p> <p>5 document as Exhibit No. 1 with a new sticker.</p> <p>6 (Whereupon, a brief discussion off the</p> <p>7 record.)</p> <p>8 (Whereupon, Exhibit 1 was marked for</p> <p>9 identification.)</p> <p>10 (Whereupon, Exhibit 2 was marked for</p> <p>11 identification.)</p> <p>12 BY MR. THORNBURGH:</p> <p>13 Q. Dr. Benight, you have Exhibit No. 1 in</p> <p>14 front of you, and I just want to make sure we're all</p> <p>15 on the same page.</p> <p>16 What is -- what -- what document do you</p> <p>17 have in front of you currently as Exhibit No. 1?</p> <p>18 A. It is a table that contains file names of</p> <p>19 the microscopy images, embedding material, type of</p> <p>20 light, whether treated to induce oxidation, question</p> <p>21 mark, underwent staining protocol, question mark,</p> <p>22 and miscellaneous notes.</p> <p>23 Q. Okay.</p> <p>24 A. This document is printed on double-sided</p> <p>25 paper and is --</p>
Page 31	Page 33
<p>1 lab notebooks, okay?</p> <p>2 A. Okay.</p> <p>3 Q. So I think the court reporter was going to</p> <p>4 pull out Document No. 4.</p> <p>5 MR. THORNBURGH: Have you done that</p> <p>6 already, Madam Court Reporter?</p> <p>7 THE REPORTER: Yes, sir.</p> <p>8 BY MR. THORNBURGH:</p> <p>9 Q. Okay. And Document No. 4, let's go ahead</p> <p>10 and mark that as Exhibit No. 1.</p> <p>11 A. It's currently marked as Exhibit No. 4.</p> <p>12 Q. Well, let -- we're going to -- I didn't</p> <p>13 want these premarked, but -- so -- that was just</p> <p>14 Document No. 4 on the index, so let's go ahead and</p> <p>15 just mark it as Exhibit Number 1, please.</p> <p>16 MR. HUTCHINSON: All right. And, Dan,</p> <p>17 just so that we have a clear record, the witness has</p> <p>18 a document in front of her that is -- somebody</p> <p>19 marked already as Exhibit 4. So do you want us</p> <p>20 to --</p> <p>21 MR. THORNBURGH: And that --</p> <p>22 MR. HUTCHINSON: Hold on just a minute.</p> <p>23 I'm talking.</p> <p>24 Do you want us just to strike out the</p> <p>25 number four and put one; is that what you want?</p>	<p>1 Q. I think you have --</p> <p>2 A. I'm not finished, sir.</p> <p>3 -- seven pages.</p> <p>4 Q. Okay. It's -- you have sufficiently</p> <p>5 identified it in terms of what it looks like, but do</p> <p>6 you recognize this document as a document that you</p> <p>7 have seen before today?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. And is this a document that you</p> <p>10 created?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. And is this a document that you are</p> <p>13 alleging is your -- I'll represent your electronic</p> <p>14 lab notebook?</p> <p>15 MR. HUTCHINSON: Object to form.</p> <p>16 THE WITNESS: This document is part of a</p> <p>17 record of the experiments performed.</p> <p>18 BY MR. THORNBURGH:</p> <p>19 Q. Would this be a document that you</p> <p>20 represent and are representing to the Court to be</p> <p>21 your electronic lab notebook?</p> <p>22 MR. HUTCHINSON: Object to form. Counsel,</p> <p>23 you have asked and answered that question a plethora</p> <p>24 of times.</p> <p>25 MR. THORNBURGH: Actually, she hasn't.</p>

9 (Pages 30 to 33)

Stephanie Benight, Ph.D.

Page 34	Page 36
<p>1 Q. Please answer my question.</p> <p>2 A. This is part of the record of experiments</p> <p>3 performed and one of the documents provided to you</p> <p>4 electronically.</p> <p>5 Q. Are you representing to the Court that</p> <p>6 this document is part of your electronic lab</p> <p>7 notebook?</p> <p>8 A. This document is part of the experiments</p> <p>9 performed. It is a record of those experiments</p> <p>10 performed.</p> <p>11 Q. Okay. And let's go ahead and mark</p> <p>12 Document No. 5 as Exhibit No. 2.</p> <p>13 MR. HUTCHINSON: All right. Hey, Dan,</p> <p>14 we're going to take a quick break. I'll be right</p> <p>15 back.</p> <p>16 MR. THORNBURGH: I'm almost finished with</p> <p>17 this line of questioning.</p> <p>18 MR. HUTCHINSON: I understand that, but I</p> <p>19 need to take a quick break.</p> <p>20 THE WITNESS: I would like to take a</p> <p>21 break.</p> <p>22 MR. HUTCHINSON: And we'll be right -- and</p> <p>23 I'll be right back.</p> <p>24 MR. THORNBURGH: No, actually, we're going</p> <p>25 to keep on going. I'm going to ask this next</p>	<p>1 experiments that were performed by you at Exponent;</p> <p>2 is that correct?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. Now, when did you create this grid</p> <p>5 of information?</p> <p>6 A. This document was created the day before</p> <p>7 Dr. MacLean's deposition.</p> <p>8 Q. Okay. So this wasn't kept contemporaneous</p> <p>9 with the experiments that you performed in this</p> <p>10 case, correct?</p> <p>11 A. This specific document was created after</p> <p>12 the experiments were performed.</p> <p>13 Q. Let's back up -- let's back up a little</p> <p>14 bit.</p> <p>15 And I want to know, when did you first get</p> <p>16 involved in this case?</p> <p>17 A. I don't know the exact date. Maybe a</p> <p>18 couple months ago.</p> <p>19 Q. Do you recall providing some time as part</p> <p>20 of an invoice that was submitted to -- to Butler</p> <p>21 Snow for the work performed in this case?</p> <p>22 A. Is there a particular invoice that you are</p> <p>23 referring to?</p> <p>24 Q. My question was, do you recall providing</p> <p>25 some information about time spent in this case so</p>
Page 35	Page 37
<p>1 question, and then we can take a break. Okay?</p> <p>2 Hello.</p> <p>3 THE REPORTER: They have left the room.</p> <p>4 THE VIDEOGRAPHER: Going off the record at</p> <p>5 12:16.</p> <p>6 (Whereupon, a brief recess was taken.)</p> <p>7 THE VIDEOGRAPHER: Back on the record at</p> <p>8 12:20.</p> <p>9 MR. HUTCHINSON: Okay, Dan. We're back.</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. Dr. Benight -- Doctor --</p> <p>12 MR. THORNBURGH: I know.</p> <p>13 Q. Dr. Benight, before we went off the</p> <p>14 record, we looked at and marked a -- an exhibit as</p> <p>15 Exhibit No. 1, which was a grid containing some</p> <p>16 information about some of the samples that were</p> <p>17 looked at during your experiment.</p> <p>18 I'll represent to the Court and for the</p> <p>19 record that this was sent to me, and it was named</p> <p>20 "Microscopy Image Index" and was produced by</p> <p>21 Dr. MacLean during his deposition on September 29th,</p> <p>22 2015.</p> <p>23 And before we went off -- we went off the</p> <p>24 record, I believe you testified that this represents</p> <p>25 some notes that you put together related to the</p>	<p>1 that your work could be invoiced to Butler Snow?</p> <p>2 A. Yes, I believe I have recorded time</p> <p>3 pertaining to this case.</p> <p>4 Q. And I'll represent to you that the first</p> <p>5 invoice was submitted in July of 2015 and a second</p> <p>6 invoice was submitted in August of 2015.</p> <p>7 Does it -- does that sound about accurate,</p> <p>8 that sometime prior to -- or in July or prior to --</p> <p>9 just prior to July, you became involved in this</p> <p>10 litigation?</p> <p>11 A. Yes.</p> <p>12 Q. And at some point, did you receive a TVT</p> <p>13 exemplar to use in your experiments?</p> <p>14 A. Yes.</p> <p>15 Q. When did you receive the TVT exemplar?</p> <p>16 A. I don't recall.</p> <p>17 Q. Did you document that in a lab notebook</p> <p>18 somewhere?</p> <p>19 A. It's recorded in Exponent's internal</p> <p>20 quality assurance system.</p> <p>21 Q. Okay. Have you produced Exponent's</p> <p>22 internal quality assurance program as part of the</p> <p>23 documents that we requested in this litigation?</p> <p>24 A. It's my understanding that the internal</p> <p>25 Exponent quality assurance system is confidential.</p>

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 38</p> <p>1 Q. Okay. So I'm -- is there any document</p> <p>2 that has been produced in this case to me that</p> <p>3 identifies for me when you would have received the</p> <p>4 TVT exemplar product?</p> <p>5 A. I don't know. I can look through the</p> <p>6 production documents.</p> <p>7 Q. Well, we're going to look through a couple</p> <p>8 of them throughout today, and if you see any</p> <p>9 anyplace -- well, actually, strike that.</p> <p>10 Let me -- I'll represent to you that there</p> <p>11 is no document that has been produced that</p> <p>12 identifies when you would have received the TVT</p> <p>13 exemplar, okay? Do you understand that</p> <p>14 representation?</p> <p>15 MR. HUTCHINSON: Object to form.</p> <p>16 THE WITNESS: Can you repeat the question?</p> <p>17 BY MR. THORNBURGH:</p> <p>18 Q. I'll represent to you that I have looked</p> <p>19 at all the documents that have been produced by</p> <p>20 Exponent in this litigation, and nothing identifies</p> <p>21 when the TVT exemplar was received by you, okay?</p> <p>22 MR. HUTCHINSON: I'm sorry, Dan. Is that</p> <p>23 a -- I'm having trouble understanding if that's a</p> <p>24 question or not.</p> <p>25 MR. THORNBURGH: No, I'm just -- I'm</p>	<p style="text-align: right;">Page 40</p> <p>1 notebooks that Exponent has available to its</p> <p>2 scientists, haven't you?</p> <p>3 A. I don't know what you are referring to. I</p> <p>4 have not been issued a specific Exponent lab</p> <p>5 notebook. I kept a record of the experiments</p> <p>6 performed for this project electronically.</p> <p>7 MR. THORNBURGH: Madam Court Reporter, can</p> <p>8 you read back that response, please?</p> <p>9 (Whereupon, the reporter read the record</p> <p>10 as follows:</p> <p>11 "Answer: I don't know what you are</p> <p>12 referring to. I have not been issued a specific</p> <p>13 Exponent lab notebook. I kept a record of the</p> <p>14 experiments performed for this project</p> <p>15 electronically.")</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. Doctor, when you received the TVT exemplar</p> <p>18 device, what did you do with it? What was the next</p> <p>19 step in your process once you -- go ahead.</p> <p>20 A. The TVT exemplar was used for the</p> <p>21 experiments covered in Dr. MacLean's expert report.</p> <p>22 Q. Okay. Was the TVT exemplar device divided</p> <p>23 into multiple samples?</p> <p>24 A. For the purposes of the experiments that</p> <p>25 are summarized in Dr. MacLean's expert report, the</p>
<p style="text-align: right;">Page 39</p> <p>1 just -- I'm just making that representation.</p> <p>2 Q. If you think -- if you believe that there</p> <p>3 is some document that you would have recorded the</p> <p>4 date that you received the TVT exemplar that has</p> <p>5 been produced to me, let me know.</p> <p>6 Otherwise, I'm going to represent to you</p> <p>7 that there is no document that recorded -- that</p> <p>8 provides me with a date that identifies when you</p> <p>9 would have received the TVT exemplar, okay?</p> <p>10 So, Doctor, do you know approximately when</p> <p>11 you would have received the TVT exemplar?</p> <p>12 A. I don't recall exactly.</p> <p>13 Q. I'm just looking for a fair estimation.</p> <p>14 I'm entitled to a fair estimation.</p> <p>15 A. I don't recall when I exactly received the</p> <p>16 TVT exemplar you are referring to.</p> <p>17 Q. And you didn't record in a sort of -- what</p> <p>18 I'll call a traditional lab notebook the date that</p> <p>19 you would have received the TVT exemplar, correct?</p> <p>20 MR. HUTCHINSON: Object to form. Dan,</p> <p>21 what do you mean by "traditional lab notebook"? If</p> <p>22 you tell me, I'll remove my objection to the</p> <p>23 question.</p> <p>24 BY MR. THORNBURGH:</p> <p>25 Q. Well, Dr. Benight, you have seen the lab</p>	<p style="text-align: right;">Page 41</p> <p>1 TVT was cut into smaller samples.</p> <p>2 Q. All right. Did you perform that work for</p> <p>3 Exponent?</p> <p>4 A. What work are you referring to? I'm not</p> <p>5 sure.</p> <p>6 Q. Dividing the exemplar TVT device into --</p> <p>7 into separate samples?</p> <p>8 A. I did. Also, others that were working on</p> <p>9 the project did as well.</p> <p>10 Q. Okay. When did you divide the TVT</p> <p>11 exemplar device?</p> <p>12 A. For these experiments, we cut the samples</p> <p>13 before we did the UV and chemically oxidized</p> <p>14 protocol exposure.</p> <p>15 Q. Okay. My question was, do you know</p> <p>16 precisely when that would have been -- that division</p> <p>17 or separation or cutting of the TVT exemplar would</p> <p>18 have taken place?</p> <p>19 A. That was done prior to the chemically</p> <p>20 oxidized protocol on the samples and the QUV</p> <p>21 oxidized protocol was conducted on the samples.</p> <p>22 Q. How many -- so you don't know the -- the</p> <p>23 exact date, correct?</p> <p>24 A. It was done prior to when those</p> <p>25 experiments were carried out.</p>

Stephanie Benight, Ph.D.

Page 42	Page 44
<p>1 Q. Okay. So you don't know the exact date</p> <p>2 that you divided the TVT exemplar, correct?</p> <p>3 A. It was done before the experiments were</p> <p>4 carried out, sir.</p> <p>5 MR. THORNBURGH: Chad, can you tell your</p> <p>6 witness to answer my questions?</p> <p>7 MR. HUTCHINSON: Well, I think she's</p> <p>8 trying to, Dan. What was your last question?</p> <p>9 MR. THORNBURGH: The exact date, when</p> <p>10 exactly did that occur?</p> <p>11 MR. HUTCHINSON: Okay. Well, I thought</p> <p>12 she was asked -- yeah, maybe I didn't hear your</p> <p>13 question.</p> <p>14 MR. THORNBURGH: I'm looking for a date,</p> <p>15 Chad.</p> <p>16 MR. HUTCHINSON: Huh?</p> <p>17 MR. THORNBURGH: So -- I'm looking for the</p> <p>18 precise date.</p> <p>19 MR. HUTCHINSON: Okay.</p> <p>20 MR. THORNBURGH: What date --</p> <p>21 MR. HUTCHINSON: Well, I don't -- I don't</p> <p>22 know the precise date. Are you asking me or --</p> <p>23 MR. THORNBURGH: No, I'm not. I'm not</p> <p>24 asking you, I'm asking your witness. If she doesn't</p> <p>25 know the precise date, all she has to say is, "I</p>	<p>1 MR. THORNBURGH: Okay.</p> <p>2 MR. HUTCHINSON: Dr. Benight, do you think</p> <p>3 we need a five-minute break?</p> <p>4 THE WITNESS: No, I don't need a break.</p> <p>5 MR. HUTCHINSON: Okay. Well, why don't</p> <p>6 you ask your question again, Dan, and let's move on.</p> <p>7 MR. THORNBURGH: For the record, Chad, you</p> <p>8 are not going to take a break to instruct your</p> <p>9 witness to answer my questions, correct?</p> <p>10 MR. HUTCHINSON: The witness has already</p> <p>11 answered your questions, Dan. What I'm telling you</p> <p>12 is, why don't you ask her again your question about</p> <p>13 the specific date, and she'll answer it if she can.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. Dr. Benight, on what date did you cut the</p> <p>16 TVT exemplar into separate pieces for your</p> <p>17 experiment?</p> <p>18 A. It was cut prior to when the experiments</p> <p>19 were performed, and I don't recall the specific</p> <p>20 date.</p> <p>21 Q. How many pieces -- strike that.</p> <p>22 How many -- how many samples or pieces of</p> <p>23 the mesh were cut?</p> <p>24 A. I don't know the exact number.</p> <p>25 Q. Is that number documented anywhere in a</p>
Page 43	Page 45
<p>1 don't know."</p> <p>2 MR. HUTCHINSON: Okay. Well, why don't</p> <p>3 you ask her -- why don't you ask your question</p> <p>4 again.</p> <p>5 MR. THORNBURGH: All right. Well, sir --</p> <p>6 MR. HUTCHINSON: And maybe we can go from</p> <p>7 there.</p> <p>8 MR. THORNBURGH: -- can you -- but before</p> <p>9 we move forward, will you please take five minutes,</p> <p>10 we'll go off the record, and please talk with your</p> <p>11 witness and ask her to start answering my questions.</p> <p>12 MR. HUTCHINSON: Well --</p> <p>13 MR. THORNBURGH: Otherwise, we're going to</p> <p>14 have to call the Court.</p> <p>15 MR. HUTCHINSON: Well, Dan, while we're</p> <p>16 making records here, the witness is answering your</p> <p>17 questions. I'm not sure you fully understand the</p> <p>18 answers that she is giving you, but the witness is</p> <p>19 answering your questions. So let's -- we just --</p> <p>20 MR. THORNBURGH: Chad, are you --</p> <p>21 MR. HUTCHINSON: Hold on a minute. I'm</p> <p>22 still talking.</p> <p>23 So we -- we just took a break. We're</p> <p>24 ready to go, so why don't you -- I don't even think</p> <p>25 we need a five-minute break.</p>	<p>1 lab notebook?</p> <p>2 A. It is documented in the documents that</p> <p>3 were provided to you electronically. The samples</p> <p>4 were given different sample numbers.</p> <p>5 Q. What size were -- was each sample?</p> <p>6 A. Which samples are you referring to? I'm</p> <p>7 not sure.</p> <p>8 Q. Okay. So -- well, it's hard for me to</p> <p>9 have this conversation without having a lab notebook</p> <p>10 to reference, but let's try to do the best we can.</p> <p>11 MR. HUTCHINSON: All right. Hey, Dan.</p> <p>12 THE WITNESS: Is that a question?</p> <p>13 MR. HUTCHINSON: Hold on just a minute.</p> <p>14 Wait a minute.</p> <p>15 Hey, Dan, look, the witness has already</p> <p>16 told you that she has provided you the -- her</p> <p>17 electronic lab notebook.</p> <p>18 MR. THORNBURGH: But --</p> <p>19 MR. HUTCHINSON: So whatever you want to</p> <p>20 reference in her lab notebook that she's already</p> <p>21 given to you, feel free to ask a question about it.</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. So you don't know -- you can't tell me</p> <p>24 right now specifically how many separate pieces of</p> <p>25 mesh were created from the pristine mesh that you</p>

Stephanie Benight, Ph.D.

Page 46	Page 48
<p>1 received sometime prior to the experiments that you</p> <p>2 conducted, correct?</p> <p>3 MR. HUTCHINSON: Object to form. Been</p> <p>4 asked and answered.</p> <p>5 THE WITNESS: I can look in the documents</p> <p>6 of the electronic lab notebook provided to you.</p> <p>7 BY MR. THORNBURGH:</p> <p>8 Q. Did you bring any documents with you</p> <p>9 today?</p> <p>10 A. I did.</p> <p>11 Q. And what did you bring with you today?</p> <p>12 A. I brought a copy of the duces tecum notice</p> <p>13 for deposition.</p> <p>14 I also brought a Histon project plan,</p> <p>15 Amendment 1, which you have been provided. I also</p> <p>16 brought a Histon chain of custody cover page and</p> <p>17 chain of custody document which I received</p> <p>18 yesterday.</p> <p>19 I brought four flash drives, three of</p> <p>20 which are the production documents, one of which was</p> <p>21 provided to you prior to Dr. MacLean's deposition, a</p> <p>22 second flash drive that contains documents that you</p> <p>23 were given over the last couple of days, and a third</p> <p>24 flash drive -- there is two copies.</p> <p>25 A third flash drive with yesterday's date</p>	<p>1 MR. HUTCHINSON: You mean --</p> <p>2 MR. THORNBURGH: -- or Exhibit 5 the</p> <p>3 Histon chain of custody.</p> <p>4 (Whereupon, Exhibit 5 was marked for</p> <p>5 identification.)</p> <p>6 MR. THORNBURGH: We'll mark as Exhibit</p> <p>7 No. 6 the flash drive that, according to your</p> <p>8 testimony, was provided prior to Dr. MacLean's</p> <p>9 deposition.</p> <p>10 (Whereupon, Exhibit 6 was marked for</p> <p>11 identification.)</p> <p>12 MR. THORNBURGH: Let's mark as Exhibit</p> <p>13 No. 7 the flash drive that, according to your</p> <p>14 testimony, are documents that were given to me over</p> <p>15 the last couple days.</p> <p>16 I assume, and correct me if I'm wrong,</p> <p>17 that Exhibit No. 7 would include the FTIR on the</p> <p>18 UV-treated specimens and some additional -- is it</p> <p>19 XP -- what -- strike that.</p> <p>20 Q. Let me just ask this, what documents are</p> <p>21 contained on Number -- on Exhibit No. 7? I believe</p> <p>22 it's probably the FTIR; is that correct?</p> <p>23 A. We haven't marked Exhibit 7 yet, sir.</p> <p>24 Q. Well, let's mark -- we're going to mark as</p> <p>25 Exhibit No. 7 the documents that were -- that you</p>
Page 47	Page 49
<p>1 that contains additional documents as part of the</p> <p>2 production related to the duces tecum, and I have</p> <p>3 also brought microscope slides as part of this</p> <p>4 study.</p> <p>5 Q. Okay. So let's do this. Let's go ahead</p> <p>6 and mark as Exhibit No. 2 the deposition notice that</p> <p>7 you brought with you today.</p> <p>8 MR. HUTCHINSON: Hey, Dan, I think we're</p> <p>9 on Exhibit No. 3; is that correct?</p> <p>10 THE WITNESS: I have two exhibits in front</p> <p>11 of me.</p> <p>12 MR. THORNBURGH: Okay. Well, Exhibit</p> <p>13 No. --</p> <p>14 MR. HUTCHINSON: As far as numbering is</p> <p>15 concerned.</p> <p>16 MR. THORNBURGH: Yeah, I hear you. So</p> <p>17 let's mark as Exhibit No. 3 the deposition notice.</p> <p>18 (Whereupon, Exhibit 3 was marked for</p> <p>19 identification.)</p> <p>20 MR. THORNBURGH: Okay. Let's mark as</p> <p>21 Exhibit 4 the Histon project plan.</p> <p>22 (Whereupon, Exhibit 4 was marked for</p> <p>23 identification.)</p> <p>24 MR. THORNBURGH: Let's mark as Exhibit No.</p> <p>25 3 the Histon chain of custody --</p>	<p>1 testified were given to me over the last couple</p> <p>2 days.</p> <p>3 A. Oh, okay. And what is --</p> <p>4 Q. I --</p> <p>5 A. I'm sorry, what is your question? I don't</p> <p>6 understand.</p> <p>7 Q. Okay. I -- I just want to make sure I</p> <p>8 understand what if -- what you believe was given to</p> <p>9 me over the last couple days.</p> <p>10 Is that the FTIR data?</p> <p>11 A. FTIR data of the oxidized -- intentionally</p> <p>12 oxidized samples.</p> <p>13 Q. Okay. Is there any other data on that</p> <p>14 flash drive?</p> <p>15 A. I believe -- I don't have it loaded on the</p> <p>16 computer in front of, me but I believe there is also</p> <p>17 x-ray photoelectron spectroscopy data as part of</p> <p>18 this study. And there is also a microscopy image</p> <p>19 index.</p> <p>20 Q. Okay. And then you testified that you</p> <p>21 brought a third flash drive that contains documents</p> <p>22 that were responsive to the deposition notice duces</p> <p>23 tecum; is that correct?</p> <p>24 A. Yes.</p> <p>25 Q. And were -- have these documents been</p>

13 (Pages 46 to 49)

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 50</p> <p>1 produced in any form prior to today?</p> <p>2 A. We are providing them to you today.</p> <p>3 MR. THORNBURGH: Now, Chad --</p> <p>4 MR. HUTCHINSON: Yeah.</p> <p>5 MR. THORNBURGH: -- I asked -- I asked you</p> <p>6 several days ago very politely to provide all</p> <p>7 documents responsive to the deposition notice prior</p> <p>8 to the -- you know, by -- you were supposed to</p> <p>9 produce it by Friday, which you represented to me</p> <p>10 you did produce on Friday.</p> <p>11 And now for the first time I'm learning</p> <p>12 that you did not produce all of the documents</p> <p>13 responsive to the request, and as you know, doing</p> <p>14 this by videoconference, that's specifically why I</p> <p>15 asked you to produce those documents before today.</p> <p>16 MR. HUTCHINSON: Hey, Dan, why don't you</p> <p>17 ask the witness about these documents. But for the</p> <p>18 record, I received them yesterday. That was the</p> <p>19 first time I had received them.</p> <p>20 BY MR. THORNBURGH:</p> <p>21 Q. Dr. Benight, what documents are contained</p> <p>22 on Flash Drive No. 3, on Exhibit 7?</p> <p>23 MR. HUTCHINSON: Exhibit 8, I believe.</p> <p>24 THE WITNESS: Exhibit 7 hasn't been marked</p> <p>25 yet.</p>	<p style="text-align: right;">Page 52</p> <p>1 A. Yes. I received the notice of deposition</p> <p>2 yesterday, and these are in response to those.</p> <p>3 Q. Okay. But you understand that I took</p> <p>4 Dr. MacLean's deposition on September 29th, correct?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. And during that -- I'll represent</p> <p>7 to you that during that -- prior to that deposition,</p> <p>8 I also provided him with a request for production of</p> <p>9 documents.</p> <p>10 So my question to you is, before</p> <p>11 Dr. MacLean's deposition, did he or anybody reach</p> <p>12 out to you and ask you to gather all documentation</p> <p>13 responsive to his request for production of</p> <p>14 documents?</p> <p>15 A. I'm sure Dr. MacLean provided all of the</p> <p>16 documents in his file related to his expert report.</p> <p>17 Q. That's not my question. My question to</p> <p>18 you is very specific.</p> <p>19 Did anybody reach out to you prior to his</p> <p>20 deposition and ask you to produce documents that</p> <p>21 related to this case or the experiments that you</p> <p>22 performed in this case?</p> <p>23 MR. HUTCHINSON: Object to form.</p> <p>24 THE WITNESS: Yes.</p> <p>25</p>
<p style="text-align: right;">Page 51</p> <p>1 MR. THORNBURGH: There we go. All right.</p> <p>2 So let's give the court reporter some time.</p> <p>3 Can you mark Exhibit No. 7, which should</p> <p>4 be the documents -- the FTIR and the x-ray</p> <p>5 photoelectron spectroscopy and -- documents?</p> <p>6 (Whereupon, Exhibit 7 was marked for</p> <p>7 identification.)</p> <p>8 MR. THORNBURGH: And we'll mark the third</p> <p>9 flash drive as Exhibit No. 8.</p> <p>10 (Whereupon, Exhibit 8 was marked for</p> <p>11 identification.)</p> <p>12 BY MR. THORNBURGH:</p> <p>13 Q. Dr. Benight, what documents are contained</p> <p>14 on Exhibit No. 8?</p> <p>15 A. I don't have it loaded in front of me, but</p> <p>16 there are additional microscopy and scanning</p> <p>17 electron microscopy images as part of the study that</p> <p>18 was summarized in Dr. MacLean's expert report.</p> <p>19 Q. And these microscopy images and scanning</p> <p>20 electron microscopy images have never been produced</p> <p>21 prior to today?</p> <p>22 A. I believe that we are producing them to</p> <p>23 you today.</p> <p>24 Q. For the first time, is that your</p> <p>25 understanding?</p>	<p style="text-align: right;">Page 53</p> <p>1 BY MR. THORNBURGH:</p> <p>2 Q. Okay. When did that occur?</p> <p>3 A. I -- before his deposition.</p> <p>4 Q. Okay. And why did you not produce the</p> <p>5 documents on Exhibit 8 prior to his deposition?</p> <p>6 A. We provided all of the documents that were</p> <p>7 referenced in the microscopy report.</p> <p>8 Q. That wasn't my question. My question --</p> <p>9 MR. HUTCHINSON: Hey, Dan -- Dan, that was</p> <p>10 responsive to your question. Why don't you just ask</p> <p>11 her what is on Exhibit 8, and I think that would</p> <p>12 help you.</p> <p>13 MR. THORNBURGH: She told me that there</p> <p>14 was additional microscopy images and scanning</p> <p>15 electron microscopy images that have never been</p> <p>16 produced before today.</p> <p>17 Q. So my question is, why haven't they been</p> <p>18 produced before today?</p> <p>19 A. In the original production, we provided</p> <p>20 images that were summarized in the report as part of</p> <p>21 the study.</p> <p>22 Q. Is it your testimony that Exhibit No. 8</p> <p>23 contains the identical or same microscopy or</p> <p>24 scanning electron microscopy images as those that</p> <p>25 are contained within his report?</p>

14 (Pages 50 to 53)

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 54</p> <p>1 A. These are additional images that were 2 taken as part of the study. 3 Q. Okay. So why weren't they produced prior 4 to today? 5 A. I don't know. 6 MR. THORNBURGH: Chad, why weren't they 7 produced prior to today? 8 MR. HUTCHINSON: Well, I just -- I just 9 got them yesterday, Dan. And that's why we produced 10 them to you. I will tell you that -- 11 MR. THORNBURGH: Here is what I want you 12 to do, Chad. I want you -- we're going to take a 13 break. 14 This deposition is going to go longer than 15 I had hoped, unfortunately, but, Chad, we're going 16 to take a break and you are going to send me those 17 documents electronically so I can review those. 18 MR. HUTCHINSON: Okay. I don't know -- 19 maybe we'll see if the court reporter can do that. 20 Can you send Mr. Thornburgh the documents 21 on Exhibit 8 via -- electronically? 22 (Whereupon, a brief discussion off the 23 record.) 24 THE VIDEOGRAPHER: Going off the record at 25 12:44.</p>	<p style="text-align: right;">Page 56</p> <p>1 Q. And, you know, I don't have a -- and I'm 2 going to just tell you, I don't have a traditional 3 lab notebook, so I have been trying to piece 4 together sort of all of the documents that you have 5 provided to me to try to understand what was done in 6 this case. 7 So let's walk through those documents, and 8 let me know if I have a misunderstanding in any way, 9 okay? 10 MR. HUTCHINSON: I'm going to object to 11 the narrative. 12 THE WITNESS: Okay. 13 BY MR. THORNBURGH: 14 Q. Okay. So -- 15 A. I don't have any -- I don't have all of 16 the production documents in front of me, sir. 17 Q. Yeah, well, the -- Madam Court Reporter 18 has the documents, so let's go ahead and look at 7A. 19 So we'll go ahead and mark that as Exhibit No. 9. 20 (Whereupon, Exhibit 9 was marked for 21 identification.) 22 BY MR. THORNBURGH: 23 Q. Okay. And, Dr. Benight, I'll -- well, 24 strike that. 25 Do you see on 7A at the very bottom it</p>
<p style="text-align: right;">Page 55</p> <p>1 (Whereupon, a brief recess was taken.) 2 MR. HUTCHINSON: No, he's going -- okay. 3 He's going. We're on the record. We have been on 4 the record all day. 5 MR. THORNBURGH: Okay. 6 Q. So before we went off the record, 7 Dr. Benight, you had indicated that there were some 8 additional microscopy and scanning electron 9 microscopy images on Exhibit No. 8 that have not 10 been produced prior to today; is that accurate? 11 A. Yes. 12 Q. Okay. Are there any other documents or 13 images or data contained within Exhibit No. 8, other 14 than the microscopy or scanning electron microscopy? 15 A. I want to look at the contents of the jump 16 drive I brought before I answer. 17 Q. I'll give you time during our next break 18 to do that, okay? 19 A. Okay. 20 Q. I want to -- I want to move forward, okay? 21 Doctor, talking about the pristine TVT 22 exemplar that you received and was divided into 23 different samples, do you recall when we were 24 talking about that or had that discussion? 25 A. Yes.</p>	<p style="text-align: right;">Page 57</p> <p>1 says, 200 KV or -- K -- I think it's KV. 2 Do you see that? 3 A. It says 20 KV. 4 Q. I'm sorry. That's what I meant. 5 20 KV X35, 500 microns is the scale. 6 Do you see that? 7 A. Yes. 8 Q. Okay. I just want to make sure we're 9 looking at the same document. And I'll represent to 10 you that when this was sent to me or produced to me, 11 it was saved as a document called Sample 4_01. 12 Would this -- would that naming -- the way 13 it was named indicate to you that this was a sample 14 that was -- that was numbered as Number 4? 15 A. If it says Sample No. 4, then it must be 16 Sample No. 4. 17 Q. Okay. And there were a couple images, 18 scanning electron microscopy images of Sample No. 4. 19 Do you recall that? 20 A. Yes. 21 Q. Okay. And then there were -- there was 22 another document that was called Sample 5_01. Would 23 that indicate to you that that was Sample No. 5? 24 A. I don't have that document in front of me. 25 Q. Okay. So, well, we're going to have to do</p>

Stephanie Benight, Ph.D.

Page 58	Page 60
<p>1 it this way, then.</p> <p>2 MR. THORNBURGH: Madam Court Reporter,</p> <p>3 let's mark as Exhibit No. 10 7B.</p> <p>4 (Whereupon, Exhibit 10 was marked for</p> <p>5 identification.)</p> <p>6 BY MR. THORNBURGH:</p> <p>7 Q. Okay. And I'll represent to you that this</p> <p>8 was sent to me as a document that was titled:</p> <p>9 "Sample 4_02," and the -- just so that we're on the</p> <p>10 same page, is your Exhibit No. 10 --</p> <p>11 A. Yes, okay. I'm holding now Exhibit</p> <p>12 No. 10.</p> <p>13 Q. Okay. And does that -- the bottom of that</p> <p>14 page say, "20 KV X200," and then have a scale of</p> <p>15 100 microns on it?</p> <p>16 A. Yes.</p> <p>17 Q. Okay. And is it your understanding that</p> <p>18 that is another scanning electron microscopy or SEM</p> <p>19 of Sample No. 4 which was intentionally oxidized</p> <p>20 using UV -- the QUV process?</p> <p>21 A. Yes.</p> <p>22 Q. Okay. The next document is 7C, for the</p> <p>23 court reporter's reference, and we'll mark that as</p> <p>24 Exhibit No. 11.</p> <p>25 (Whereupon, Exhibit 11 was marked for</p>	<p>1 BY MR. THORNBURGH:</p> <p>2 Q. Okay. And I'll represent to you -- well,</p> <p>3 do you see at the bottom, it says -- it says, "times</p> <p>4 200, 100-micron scale"?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. And I'll represent to you that that</p> <p>7 was Image 4 of -- of Sample No. 4 again, okay?</p> <p>8 A. Okay.</p> <p>9 Q. All right. So let's go ahead and try to</p> <p>10 speed this process up a little bit. I'm going to</p> <p>11 have the court reporter take Exhibit -- a document</p> <p>12 numbered 7E, 7F, 7G, and we'll just make that one</p> <p>13 exhibit and we'll call that Exhibit No. 13.</p> <p>14 (Whereupon, Exhibit 13 was marked for</p> <p>15 identification.)</p> <p>16 (Whereupon, a brief discussion off the</p> <p>17 record.)</p> <p>18 BY MR. THORNBURGH:</p> <p>19 Q. Okay. I'll represent to you that these --</p> <p>20 are you ready? I'm sorry.</p> <p>21 A. I have Exhibit 13 in front of me.</p> <p>22 Q. Okay. And I'll represent to you that</p> <p>23 these images were sent to us as -- titled Sample 5.</p> <p>24 So would that indicate to you that a</p> <p>25 Sample 5 was treated with QUV and -- and then looked</p>
Page 59	Page 61
<p>1 identification.)</p> <p>2 BY MR. THORNBURGH:</p> <p>3 Q. Okay. And at the bottom of that, do you</p> <p>4 see it says, "20 KV X35, 500 micron scale"?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. And this was sent to me as a</p> <p>7 document titled: "Sample 4_03."</p> <p>8 Does it -- does that indicate to you that</p> <p>9 this was a image of the QUV-treated Sample No. 4?</p> <p>10 A. If it is with the same set of images, yes.</p> <p>11 Q. Okay. So I'm going to try to speed this</p> <p>12 up a little bit. Let's take the next three images,</p> <p>13 sorry, next --</p> <p>14 MR. HUTCHINSON: Are you talking about</p> <p>15 what has already been marked, Dan?</p> <p>16 MR. THORNBURGH: Yes -- no, no -- no,</p> <p>17 withdraw that.</p> <p>18 MR. HUTCHINSON: Okay.</p> <p>19 MR. THORNBURGH: I'm going to withdraw</p> <p>20 that.</p> <p>21 The next document we'll mark as Exhibit</p> <p>22 No. 12, which was 7D for your reference, Madam Court</p> <p>23 Reporter.</p> <p>24 (Whereupon, Exhibit 12 was marked for</p> <p>25 identification.)</p>	<p>1 at under the scanning electron microscopy images?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. And then let's go ahead and mark</p> <p>4 the next two images, which are 7H and 7I, as Exhibit</p> <p>5 No. 14.</p> <p>6 (Whereupon, a brief discussion off the</p> <p>7 record.)</p> <p>8 (Whereupon, Exhibit 14 was marked for</p> <p>9 identification.)</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. Okay. And, Dr. Benight, this document was</p> <p>12 sent to us as -- it was titled: "Sample 6."</p> <p>13 So would that indicate to you that Sample</p> <p>14 6 was treated with QUV radiation and then -- and</p> <p>15 looked at using scanning electron microscopy?</p> <p>16 A. Yes, if -- with the same other set of</p> <p>17 images, then yes.</p> <p>18 Q. Okay. So we were talking about how the</p> <p>19 pristine TVT was divided, and we just looked at some</p> <p>20 scanning electron microscopy of a sample No. 4, a</p> <p>21 Sample No. 5, and a Sample No. 6, correct?</p> <p>22 A. That's what you have indicated, yes.</p> <p>23 Q. Okay. Well, does that indicate to you</p> <p>24 that -- whatever you have divided, there were three</p> <p>25 samples that were treated using QUV to intentionally</p>

16 (Pages 58 to 61)

Stephanie Benight, Ph.D.

Page 62	Page 64
<p>1 photooxidize those -- those samples and then were 2 looked at using scanning electron microscopy? 3 MR. HUTCHINSON: Object to form. 4 THE WITNESS: Can you repeat the question, 5 please? 6 MR. THORNBURGH: Yes. 7 Q. So I think I can tell from sort of piecing 8 this information together that a Sample No. 4, a 9 Sample No. 5, and a Sample No. 6 were subjected to 10 QUV radiation for intentional oxidation -- 11 photooxidation, correct? 12 A. That's correct. 13 Q. Were there any other samples that were 14 treated using QUV? 15 A. There may have been, yes. 16 Q. Okay. What other samples were treated 17 using the QUV process? 18 A. Well, there was only one batch of samples 19 treated in that process, including Samples 4, 5, and 20 6. 21 Q. Okay. So what do you mean by "one batch 22 of samples treated using that process"? 23 A. They were all included in the QUV chamber 24 at the same time. 25 Q. Okay. So you -- is it -- is it -- is it</p>	<p>1 figure that out as we go. 2 But after the photooxidation process using 3 your QUV machine, what was the next step in your 4 experiment? 5 A. They were imaged with scanning electron 6 microscopy. 7 Q. Okay. And those are the documents that we 8 just marked, correct? 9 A. These are some SEM images of the samples, 10 yes. I believe it's Samples 4, 5, and 6. 11 Q. Okay. And what was the next process in 12 your experiment after the QUV and after the scanning 13 electron microscopy? 14 A. I believe we did FTIR, or Fourier 15 transform infrared spectroscopy. 16 Q. Okay. Before we get there, what's -- what 17 was the purpose of doing FTIR? 18 A. Dr. Guelcher did FTIR in his protocol for 19 the chemically oxidized mesh given in the IUGA 20 proceedings paper. 21 Q. Okay. So let's just -- let's separate 22 sort of the experiments that you did -- for now 23 let's just talk about the QUV experiment, okay, 24 where you photooxidized the mesh using radiation in 25 your QUV machine, okay?</p>
Page 63	Page 65
<p>1 fair for me to try to sort of restate -- strike 2 that. 3 Let me see if I understand. 4 So you took Samples 4, 5, and 6, and you 5 put those in the QUV and treated those to 6 intentionally oxidize those using photooxidation? 7 A. Yes. 8 Q. All right. Were there any other samples 9 that were treated using -- the QUV process? 10 MR. HUTCHINSON: Object to form. Been 11 asked and answered. 12 THE WITNESS: Yes, I believe there were 13 other samples. 14 BY MR. THORNBURGH: 15 Q. Okay. What samples -- what other samples 16 are there? 17 A. Most likely Numbers 1, 2, and 3. 18 Q. And where would Numbers -- the process of 19 QUV of Samples No. 1, 2, and 3 be recorded? 20 A. I would have to look at the production 21 documents, but we may have not imaged all six 22 samples. 23 Q. Okay. Well, let's try to -- so we'll 24 figure this out. We know that 4, 5, and 6 and 25 potentially additional samples, and we'll try to</p>	<p>1 A. Okay. 2 Q. Okay. So after the scanning electron 3 microscopy was conducted on those samples that were 4 treated with UV radiation on the -- in the QUV 5 machine, what was the next process? 6 A. We performed FTIR. 7 Q. When was the FTIR performed? 8 A. After the samples had been exposed in the 9 QUV chamber. 10 Q. Do you have a date? 11 A. I don't recall a specific date. They -- 12 FTIR was performed after the samples had been 13 exposed in the QUV chamber. 14 Q. Why did you do FTIR analysis of the 15 UV-treated specimens? 16 A. We did FTIR because it was part of 17 Dr. Guelcher's protocol in the chemically oxidized 18 mesh. 19 Q. Did you do FTIR because you were 20 attempting to demonstrate that the oxidized TVT 21 device doesn't stain? 22 A. The purposes of these experiments were 23 that they were a simple set of control experiments 24 performed to investigate whether intentionally 25 oxidized Prolene stains with H&E.</p>

Stephanie Benight, Ph.D.

Page 66	Page 68
<p>1 Q. Was it important for you to demonstrate</p> <p>2 that the specimens that were treated with UV were</p> <p>3 actually oxidized before they were submitted to</p> <p>4 Histon?</p> <p>5 A. We performed FTIR on the samples that were</p> <p>6 processed because, as part of Dr. Guelcher's</p> <p>7 protocol, he also did FTIR.</p> <p>8 Q. Right, but what -- was it important for</p> <p>9 you to demonstrate that -- because part of the</p> <p>10 QUV -- part of your experiment was to -- was also to</p> <p>11 demonstrate that oxidized mesh doesn't stain using</p> <p>12 H&E.</p> <p>13 Is that -- is that a fair understanding of</p> <p>14 part of your purpose of those experiments?</p> <p>15 A. Intentionally oxidized mesh, yes.</p> <p>16 Q. Okay. And so in order for your tests to</p> <p>17 be valid, is it fair to say that you had to conduct</p> <p>18 the FTIR to demonstrate that the specimens were</p> <p>19 actually oxidized before they were sent to Histon</p> <p>20 to be stained?</p> <p>21 MR. HUTCHINSON: Object to form.</p> <p>22 THE WITNESS: We did carry out FTIR to</p> <p>23 look for hallmarks of oxidation in the QUV-exposed</p> <p>24 samples.</p> <p>25</p>	<p>1 strike that.</p> <p>2 Let me just tell you sort of what this</p> <p>3 document was named when it was sent to me. It was</p> <p>4 named "QUV 6."</p> <p>5 Do you know why -- well, what "QUV 6"</p> <p>6 would mean?</p> <p>7 MR. HUTCHINSON: I am going to object to</p> <p>8 form.</p> <p>9 THE WITNESS: "QUV" would indicate that</p> <p>10 the sample was exposed to QUV irradiation.</p> <p>11 BY MR. THORNBURGH:</p> <p>12 Q. Okay. And it was identified also as 6.</p> <p>13 Would that indicate to you that this FTIR</p> <p>14 was done on Sample No. 6?</p> <p>15 A. I believe so, yes.</p> <p>16 Q. Okay. And then if you look at the next</p> <p>17 page of Exhibit No. 15, you will see that's just</p> <p>18 a -- looks like a -- zoomed-in on the same FTIR</p> <p>19 spectra that we just looked at as Exhibit -- on the</p> <p>20 first page of Exhibit 15, right?</p> <p>21 A. Yes.</p> <p>22 Q. Okay. And then the third page is --</p> <p>23 it's -- on the top left-hand corner, it says, "QUV</p> <p>24 Oxidized No. 4."</p> <p>25 Do you see that?</p>
Page 67	Page 69
<p>1 BY MR. THORNBURGH:</p> <p>2 Q. Okay. And that's because you wanted to --</p> <p>3 you wanted to make sure that the specimens that were</p> <p>4 treated with UV were actually oxidized, right?</p> <p>5 A. Well, we wanted to do that because</p> <p>6 Dr. Guelcher did that in his protocol.</p> <p>7 Q. Okay. So if we can look at Exhibit No. --</p> <p>8 or Document No. 6A.</p> <p>9 THE REPORTER: 6A is before the witness.</p> <p>10 MR. THORNBURGH: Okay. Can you also give</p> <p>11 the witness 6B?</p> <p>12 THE REPORTER: 6B.</p> <p>13 MR. THORNBURGH: 6C. And then we'll mark</p> <p>14 those as Composite Exhibit No. -- I think we're on</p> <p>15 14, is that right?</p> <p>16 THE REPORTER: 15.</p> <p>17 MR. THORNBURGH: 15.</p> <p>18 (Whereupon, a brief discussion off the</p> <p>19 record.)</p> <p>20 (Whereupon, Exhibit 15 was marked for</p> <p>21 identification.)</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. Okay. Dr. Benight, if you look at the</p> <p>24 first page on Exhibit 15, what -- what are we</p> <p>25 looking at here? Is this an FTIR image of -- well,</p>	<p>1 A. Yes.</p> <p>2 Q. And regarding the QUV-treated specimens or</p> <p>3 the UV-treated specimens, the only FTIR that was</p> <p>4 produced to me were for Specimen 6 and Specimen 4.</p> <p>5 Was there any additional FTIR done on any</p> <p>6 other samples that were treated with QUV?</p> <p>7 A. Not that I'm aware of.</p> <p>8 Q. Okay. And this document -- this FTIR</p> <p>9 spectra would have been created at the time that the</p> <p>10 FTIR was conducted; is that correct?</p> <p>11 A. We acquired some of these spectra prior to</p> <p>12 sending the samples to Histon for processing,</p> <p>13 embedding, and staining.</p> <p>14 Q. Okay. My question was, to you, these FTIR</p> <p>15 spectra would have been created at the time that the</p> <p>16 FTIR was performed on those samples, correct?</p> <p>17 A. Oh, yes. The spectrum is an output of the</p> <p>18 FTIR experiment.</p> <p>19 Q. Okay.</p> <p>20 MR. HUTCHINSON: Hey, Dan, could you back</p> <p>21 away from your microphone, please? We're getting a</p> <p>22 tremendous amount of static over here.</p> <p>23 MR. THORNBURGH: I'll do my best, but I</p> <p>24 can't really control it.</p> <p>25 So let's go --</p>

Stephanie Benight, Ph.D.

Page 70	Page 72
<p>1 THE VIDEOGRAPHER: It's the sound of your 2 paper that you are handling. 3 MR. THORNBURGH: Okay. 4 Let's look at -- mark as Exhibit No. 16 5 the document that was sent to you as 6D, Madam Court 6 Reporter. 7 (Whereupon, a brief discussion off the 8 record.) 9 (Whereupon, Exhibit 16 was marked for 10 identification.) 11 BY MR. THORNBURGH: 12 Q. Okay. Doctor, do you understand what 13 metadata is? 14 A. Yes. 15 Q. Okay. Certain documents contain data 16 regarding when the document was created and who 17 created the document, right? 18 A. Yes. 19 Q. Okay. This -- this document is -- Exhibit 20 No. 16 are the properties from the QUV Specimen 4 21 FTIR, which was marked as Exhibit No. 15. 22 And you will see if -- you see if you look 23 at this document, you see where it says, "Created"? 24 A. Yes. 25 Q. What date do you see there?</p>	<p>1 Dr. Benight, please go ahead and finish 2 your answer. 3 THE WITNESS: This spectrum that you are 4 discussing, created on October the 5th, was created 5 because the previous FTIR spectrum of Sample No. 4, 6 we did not save a background spectrum. 7 And so this spectrum was created recently, 8 and the background spectrum associated with it was 9 saved to show that the FTIR spectrum of each is the 10 same. 11 BY MR. THORNBURGH: 12 Q. Well, where is the FTIR spectra of Sample 13 No. 4 that was done any time prior to October 5th? 14 A. If I recall, that was in one of the 15 exhibits that we just marked. I'm looking at 16 Exhibit No. 6C. 17 Q. Yeah. And this is the properties from 18 Exhibit No. 16 -- from Sample No. 4. 19 So my question is, where is the FTIR 20 spectrum or spectra done on Sample No. 4 prior to 21 October 5th? 22 MR. HUTCHINSON: Object to form. 23 THE WITNESS: If it is not included, then 24 an FTIR spectrum of Number 6 or Number 5 or another 25 sample that was processed and treated by QUV in the</p>
Page 71	Page 73
<p>1 A. October the 5th, 2015. 2 Q. Okay. So I'm correct, aren't I, that the 3 FTIR that was done on -- on Sample No. 4 was 4 actually conducted on October 5th of 2015, correct? 5 A. This particular spectrum was created on 6 October 5th, 2015, and the reason is because the 7 previous -- 8 Q. I -- 9 A. I'm not finished with my answer. Let me 10 finish. 11 Q. Excuse me. 12 MR. HUTCHINSON: Dan, I'm sorry, but the 13 witness is -- 14 MR. THORNBURGH: This is my deposition. 15 Q. My question was -- 16 MR. HUTCHINSON: Hey, Dan, the witness 17 is -- no, Dan, the witness is going to finish her 18 answer. 19 (Overlapping speakers.) 20 MR. HUTCHINSON: Dr. Benight, you can 21 finish your answer. Go on. Dan wants to hear it. 22 THE WITNESS: So the -- oh, I thought -- 23 MR. THORNBURGH: Well, I -- move to 24 strike. 25 MR. HUTCHINSON: Okay.</p>	<p>1 same batch was already provided. 2 BY MR. THORNBURGH: 3 Q. Well, I have the -- I'm going to -- I'll 4 represent to you that the property for the metadata 5 for the FTIR of Sample 6 also indicates that it was 6 created on October 5th. 7 A. What exhibit are you referring to, sir? 8 Q. Exhibit No. -- the metadata for the FTIR 9 spectra that were contained in -- in Exhibit No. 15 10 shows that the FTIR for Sample No. 4 and Sample No. 11 6 were both done on October 5th. 12 A. The spectra that were acquired on 13 October 5th were a repeat acquisition so that we 14 could save the background spectrum related to that 15 sample. 16 The data -- the FTIR data from these 17 spectra were similar to those collected after QUV 18 processing. 19 Q. Okay. So listen to my question, okay. 20 Where are the FTIR spectra of any sample 21 of UV-treated specimens that were conducted prior to 22 October 5th of 2015? 23 A. FTIR spectra of the QUV process sample 24 were acquired after QUV processing, and those 25 documents have been included in the production.</p>

19 (Pages 70 to 73)

Stephanie Benight, Ph.D.

Page 74	Page 76
<p>1 Q. I'm telling you, they haven't. I haven't</p> <p>2 received any other --</p> <p>3 MR. HUTCHINSON: And, Dan, I'm sorry.</p> <p>4 Please do not argue with the witness. I know you</p> <p>5 are frustrated because you may not have had the</p> <p>6 opportunity to be here today, but please do not</p> <p>7 argue with the witness.</p> <p>8 BY MR. THORNBURGH:</p> <p>9 Q. Tell me where I can locate the FTIR</p> <p>10 spectra for Sample No. 5?</p> <p>11 A. I would have to look in the production. I</p> <p>12 don't have all of the spectra in front of me at the</p> <p>13 moment.</p> <p>14 Q. Look at -- look at the production, take</p> <p>15 your time.</p> <p>16 A. Okay.</p> <p>17 Q. I want -- I need an answer to this.</p> <p>18 THE WITNESS: Do we have --</p> <p>19 MR. HUTCHINSON: Oh, look at -- what do</p> <p>20 you want her to look at, Dan?</p> <p>21 MR. THORNBURGH: I want her to look at</p> <p>22 Exhibit -- Exhibit No. 7 -- sorry, Exhibit No. 6, 7,</p> <p>23 and 8 and tell me where the FTIR spectra for any</p> <p>24 QUV-treated samples are located that -- that would</p> <p>25 have been conducted prior to October 5th.</p>	<p>1 THE VIDEOGRAPHER: Back on the record.</p> <p>2 Time is 1:28.</p> <p>3 MR. HUTCHINSON: Hey, Dan, while we were</p> <p>4 on the break, Dr. Benight borrowed the witness' --</p> <p>5 I'm sorry, the court reporter's laptop.</p> <p>6 And it's my understanding that it may not</p> <p>7 have the software on there indicated to -- or</p> <p>8 needed, rather, to open up the flash drives. But</p> <p>9 you can -- you can ask the follow-up questions.</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. Dr. Benight, so I understand from Chad's</p> <p>12 representations that you are unable to open up the</p> <p>13 flash drive; is that correct?</p> <p>14 A. I can see the documents, but I can't open</p> <p>15 up the PowerPoint files.</p> <p>16 Q. Did you have a document, was there a</p> <p>17 document name or a document that had a name or was</p> <p>18 titled some -- by some way that refreshed your</p> <p>19 recollection on where the FTIR data on the</p> <p>20 UV-treated samples conducted prior to October 5th</p> <p>21 would be located?</p> <p>22 A. Well, I can't read the document or open</p> <p>23 it, but I believe it's QUV Oxidized_Mesh No. 4.</p> <p>24 Q. Okay. Well, Doctor, we just looked at</p> <p>25 QUV -- we just looked at Exhibit No. 15. We looked</p>
Page 75	Page 77
<p>1 MR. HUTCHINSON: All right. That's on a</p> <p>2 flash drive.</p> <p>3 MR. THORNBURGH: Do you have a computer</p> <p>4 with you?</p> <p>5 MR. HUTCHINSON: No, I don't have a</p> <p>6 computer with me.</p> <p>7 MR. THORNBURGH: Madam Court Reporter, I</p> <p>8 understand from, I think, discussion that we had</p> <p>9 earlier that Dr. Benight has her computer with her.</p> <p>10 THE WITNESS: I don't have a computer with</p> <p>11 me.</p> <p>12 MR. THORNBURGH: Okay. Madam -- the --</p> <p>13 Madam -- the court reporter has her computer.</p> <p>14 So let's put in the flash drive and</p> <p>15 identify for me where the FTIR spectra are for any</p> <p>16 UV-treated specimens that were conducted prior to</p> <p>17 October 5th of 2015.</p> <p>18 (Whereupon, a brief discussion off the</p> <p>19 record.)</p> <p>20 MR. HUTCHINSON: Dan, why don't we go off</p> <p>21 the record while we are getting everything set up.</p> <p>22 MR. THORNBURGH: That's fine.</p> <p>23 THE VIDEOGRAPHER: This is the end of Tape</p> <p>24 No. 1. Going off the record at 1:18.</p> <p>25 (Whereupon, a discussion off the record.)</p>	<p>1 at the FTIR for Number 4, Sample No. 4.</p> <p>2 Do you recall looking at that?</p> <p>3 A. Were we looking at that document or were</p> <p>4 we looking at the PowerPoint in the</p> <p>5 2015-10-05_Repeat FTIR document?</p> <p>6 MR. HUTCHINSON: Yeah, this has gotten</p> <p>7 confusing. You guys, I don't know how we need to</p> <p>8 get on the same page, but we need to do that.</p> <p>9 BY MR. THORNBURGH:</p> <p>10 Q. Well, so if we look at Exhibit No. 15?</p> <p>11 A. Okay.</p> <p>12 Q. Okay. There was FTIR data on Sample No. 6</p> <p>13 and FTIR data on Sample No. 4.</p> <p>14 A. Well, the only labels are Number 4 within</p> <p>15 Exhibit No. 15.</p> <p>16 Q. Right. Exactly.</p> <p>17 A. Okay.</p> <p>18 Q. Okay. And then we looked at Exhibit No.</p> <p>19 16, which was the -- the metadata for Exhibit No.</p> <p>20 15, Sample No. 4, which demonstrated that that FTIR</p> <p>21 spectra was created on October 5th, 2015.</p> <p>22 A. The FTIR spectra that were created on</p> <p>23 October 5th are in the 2015-10-05_Repeat FTIR folder</p> <p>24 in a document that is 2015-10-05_Summary.</p> <p>25 Q. So, I'm sorry, somehow I was on mute.</p>

20 (Pages 74 to 77)

Stephanie Benight, Ph.D.

Page 78	Page 80
<p>1 Are you guys still there?</p> <p>2 A. I can hear you now, yes.</p> <p>3 Q. Okay. So you weren't --</p> <p>4 MR. THORNBURGH: What was the last line of</p> <p>5 questioning?</p> <p>6 MR. HUTCHINSON: And, Dan, I'm sorry. We</p> <p>7 can hear you guys on the phone, so back up --</p> <p>8 (Overlapping speakers.)</p> <p>9 MR. THORNBURGH: Yeah, what -- yeah, what</p> <p>10 was the -- what was the last line of -- what was</p> <p>11 the -- I'm asking the court reporter what the last</p> <p>12 question was, because I was on mute and I'm not sure</p> <p>13 how long I was on mute for.</p> <p>14 (Whereupon, the reporter read the record</p> <p>15 as follows:</p> <p>16 "Question: Okay. And then we looked at</p> <p>17 Exhibit No. 16, which was the -- the metadata for</p> <p>18 Exhibit No. 15, Sample No. 4, which demonstrated</p> <p>19 that that FTIR spectra was created on October 5th,</p> <p>20 2015.")</p> <p>21 MR. HUTCHINSON: Object to form.</p> <p>22 MR. THORNBURGH: Was there a question to</p> <p>23 that -- was there an answer to that, I mean?</p> <p>24 (Whereupon, the reporter read the record</p> <p>25 as follows:</p>	<p>1 entitled: "2015-10-05_Summary."</p> <p>2 Q. Listen to my question very carefully.</p> <p>3 What UV-treated samples were analyzed</p> <p>4 using FTIR prior to October 5th, 2015?</p> <p>5 MR. HUTCHINSON: Dan, the witness has</p> <p>6 already answered your question, sir.</p> <p>7 BY MR. THORNBURGH:</p> <p>8 Q. No, just tell me the sample number?</p> <p>9 A. Sir, I can't open the PowerPoint document</p> <p>10 to confirm which samples you are referring to.</p> <p>11 MR. HUTCHINSON: Dan, maybe if you had --</p> <p>12 since you are not here, maybe if you had a document</p> <p>13 you could show the witness, that may be helpful.</p> <p>14 MR. THORNBURGH: I just showed the witness</p> <p>15 Exhibit No. 15. Exhibit No. 15 was the FTIR of QUV</p> <p>16 6 and the FTIR of QUV -- the FTIR of QUV-treated</p> <p>17 Sample No. 4.</p> <p>18 MR. HUTCHINSON: Yes, and, Dan, what I'm</p> <p>19 telling you is that you are asking her a very</p> <p>20 specific question, you are not here, she's referring</p> <p>21 to a documents on a flash drive.</p> <p>22 We cannot open up the documents on a flash</p> <p>23 drive because we didn't bring a computer nor did you</p> <p>24 bring a computer, and the court reporter has</p> <p>25 graciously allowed us to borrow her computer, and</p>
Page 79	Page 81
<p>1 "Answer: The FTIR spectra that were</p> <p>2 created on October 5th are in the 2015-10-05_Repeat</p> <p>3 FTIR folder in a document that is</p> <p>4 2015-10-05_Summary.")</p> <p>5 BY MR. THORNBURGH:</p> <p>6 Q. So, doctor, just tell me, what UV-treated</p> <p>7 specimens or samples were submitted for FTIR</p> <p>8 analysis prior to October 5th of 2015?</p> <p>9 A. Well, the samples that were -- the FTIR</p> <p>10 spectra that were acquired on October 5th, 2015, are</p> <p>11 in the 2015-10-05_Repeat FTIR folder in the</p> <p>12 2015-10-05_Summary document.</p> <p>13 I'm unable to open the document in the</p> <p>14 previous folder that is labeled QUV Oxidized_Mesh</p> <p>15 No. 4.</p> <p>16 Q. You must not understand me, okay, so I'm</p> <p>17 going to try to simplify this. We looked at Sample</p> <p>18 No. 4 in Exhibit No. 15. We looked at the metadata</p> <p>19 for Sample No. 4, which demonstrated that the FTIR</p> <p>20 of Sample No. 4 was done on October 5th, 2015.</p> <p>21 A. Sir, I can't tell what spectra are</p> <p>22 included in the metadata printout, Exhibit 16, but I</p> <p>23 can tell you that the spectra acquired on</p> <p>24 October 5th, 2015, are contained in the</p> <p>25 2015-10-05_Repeat FTIR folder in the document</p>	<p>1 for whatever reason it does not have the software on</p> <p>2 it where Dr. Benight can open all of the files on</p> <p>3 the flash drives marked as Exhibits 6, 7, or 8.</p> <p>4 So that's not our problem. That's your</p> <p>5 problem.</p> <p>6 MR. THORNBURGH: My question is very</p> <p>7 simple.</p> <p>8 Q. Doctor -- so let's just back up a little</p> <p>9 bit, because I'm not trying to trick you. I'm not</p> <p>10 trying to, you know, ask you difficult questions.</p> <p>11 I'm not trying to ask you questions that you</p> <p>12 shouldn't be able to answer.</p> <p>13 So let's just back up a little bit.</p> <p>14 I understand that we -- you received the</p> <p>15 pristine exemplar TVT and that exemplar was cut into</p> <p>16 pieces and there were certain samples that were</p> <p>17 treated using the QUV machine to photooxidize it,</p> <p>18 and then after -- and that's correct, right?</p> <p>19 A. Yes.</p> <p>20 Q. Okay. And then -- and then you testified</p> <p>21 that after you put those samples in the QUV machine</p> <p>22 to photooxidize them, you then looked at Samples 4,</p> <p>23 5, and 6, at least, and did scanning electron</p> <p>24 microscopy.</p> <p>25 And then you testified and you represented</p>

Stephanie Benight, Ph.D.

Page 82	Page 84
<p>1 to the Court and to me that the next process in</p> <p>2 your -- in your study, was to do FTIR analysis.</p> <p>3 Okay. So we have a -- a disagreement, I think, on</p> <p>4 when that FTIR analysis was done.</p> <p>5 You are representing to the Court that the</p> <p>6 FTIR analysis was conducted prior to October 5th of</p> <p>7 2015 and prior to -- I believe, prior to the next</p> <p>8 process in your experiment, which would have been</p> <p>9 embedding some samples in either resin or paraffin.</p> <p>10 Is that accurate?</p> <p>11 MR. HUTCHINSON: Dan, I'm going to object</p> <p>12 to the form of the question. It's entirely too</p> <p>13 long. Can you please rephrase?</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. Are you representing to the Court that you</p> <p>16 did FTIR analysis of UV-treated specimens or samples</p> <p>17 prior to October 5th, 2015?</p> <p>18 A. Yes.</p> <p>19 Q. Okay. You just can't tell me right now</p> <p>20 which samples were analyzed prior to October 5th,</p> <p>21 2015 --</p> <p>22 MR. HUTCHINSON: And just -- and just</p> <p>23 let --</p> <p>24 BY MR. THORNBURGH:</p> <p>25 Q. -- is that correct?</p>	<p>1 Q. Okay. And you are representing under oath</p> <p>2 to the Court that prior to October 5th, 2015,</p> <p>3 certain UV-treated specimens, or samples, were</p> <p>4 analyzed using FTIR, correct?</p> <p>5 A. Yes, we did that.</p> <p>6 Q. Okay. And you just can't -- and I</p> <p>7 understand that right now you can't identify which</p> <p>8 samples?</p> <p>9 A. I can't open a document to confirm which</p> <p>10 samples were measured with FTIR.</p> <p>11 Q. Okay. So -- but you -- but I think we --</p> <p>12 I understand from your testimony, that Sample No. 6</p> <p>13 and Sample No. 4 were done -- there was a repeat</p> <p>14 FTIR done on October 5th, 2015; is that a fair</p> <p>15 understanding?</p> <p>16 A. The FTIR that was done on October 5th,</p> <p>17 2015, is contained in the folder labeled</p> <p>18 2015-10-05_Repeat FTIR in the document entitled:</p> <p>19 "2015-10-05_Summary."</p> <p>20 Q. Okay.</p> <p>21 A. Included in that folder is a background</p> <p>22 file, a background image file, a file named</p> <p>23 "QUV_6_.csv," an image file entitled: "QUV_6_," and</p> <p>24 another QUV file labeled "QUV_6_zoom."</p> <p>25 MR. THORNBURGH: Madam Court Reporter,</p>
Page 83	Page 85
<p>1 MR. HUTCHINSON: And just let the record</p> <p>2 reflect that are you asking her to look at documents</p> <p>3 on flash drives and you have provided no computer</p> <p>4 for the witness to review the flash drives, sir.</p> <p>5 MR. THORNBURGH: Excuse me. Excuse me.</p> <p>6 Chad --</p> <p>7 MR. HUTCHINSON: Do you understand?</p> <p>8 MR. THORNBURGH: Chad, Chad, Chad, stop</p> <p>9 this, okay.</p> <p>10 MR. HUTCHINSON: No. You are asking her</p> <p>11 about documents on the flash drive --</p> <p>12 (Overlapping speakers.)</p> <p>13 MR. THORNBURGH: It's my choice. You are</p> <p>14 wasting my time.</p> <p>15 MR. HUTCHINSON: You are wasting this</p> <p>16 witness' time, more importantly.</p> <p>17 MR. THORNBURGH: So -- I'm just trying to</p> <p>18 understand where we are.</p> <p>19 Q. So you -- all I said was you are</p> <p>20 representing to the Court -- and let me withdraw</p> <p>21 that question.</p> <p>22 You still understand, even though we have</p> <p>23 had breaks, that you are under oath, right,</p> <p>24 Dr. Benight?</p> <p>25 A. Yes, I understand.</p>	<p>1 were you able to -- did you -- were you able to</p> <p>2 print out Exhibit No -- or Document No. 13A and 13B?</p> <p>3 (Whereupon, a brief discussion off the</p> <p>4 record.)</p> <p>5 MR. THORNBURGH: Actually, strike that.</p> <p>6 Q. So I think I -- I think I understand your</p> <p>7 testimony.</p> <p>8 Your testimony is the only -- the only</p> <p>9 samples that were rerun on October 5th of 2015 are</p> <p>10 the documents -- are the -- are the FTIR spectra</p> <p>11 that are contained within the file folder that you</p> <p>12 just identified?</p> <p>13 MR. HUTCHINSON: Object to form.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. That -- is that your testimony?</p> <p>16 A. Yes. We did repeat FTIR spectra on -- to</p> <p>17 repeat the spectra that were already acquired after</p> <p>18 the QUV samples were processed so that we could save</p> <p>19 a background spectrum and show that the spectrum</p> <p>20 were the same as the previously acquired spectra.</p> <p>21 Q. Okay. Now, Exhibit -- I'm going to</p> <p>22 represent to you as an officer of the Court that</p> <p>23 Exhibit No. 16 is the metadata for the FTIR spectra</p> <p>24 of Sample No. 4, okay?</p> <p>25 And Exhibit No. 16 indicates that the FTIR</p>

22 (Pages 82 to 85)

Stephanie Benight, Ph.D.

Page 86	Page 88
<p>1 spectra performed on Sample No. 4 was also done on</p> <p>2 October 5th, 2015, okay? That's what the metadata</p> <p>3 shows. So what I don't have is FTIR -- well, let me</p> <p>4 ask you this question.</p> <p>5 Let's assume with me that -- that Sample</p> <p>6 No. 4 and Sample No. 6 of the UV-treated samples</p> <p>7 were analyzed using FTIR microscopy on October 5th</p> <p>8 of 2015.</p> <p>9 Does that mean that Sample No. 4 and</p> <p>10 Sample No. 6 were not submitted or processed using</p> <p>11 paraffin or resin and submitted for histology</p> <p>12 analysis?</p> <p>13 MR. HUTCHINSON: Object to form.</p> <p>14 THE WITNESS: Can you repeat the question,</p> <p>15 please?</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. Yes. I'm -- here's what I'm trying to</p> <p>18 figure out, and I'm, you know, doing it the best I</p> <p>19 can by piecing together data from things that were</p> <p>20 produced.</p> <p>21 I'm trying to understand what samples,</p> <p>22 what UV-treated samples were processed for histology</p> <p>23 purposes?</p> <p>24 A. UV samples that were processed in the same</p> <p>25 batch as the spectra of these samples were sent to</p>	<p>1 question, I think we'll be out of here in short</p> <p>2 order.</p> <p>3 MR. THORNBURGH: Chad -- Chad, I would</p> <p>4 appreciate -- we would be out of here a lot quicker</p> <p>5 if your witness would answer my questions and you</p> <p>6 would stop speaking.</p> <p>7 MR. HUTCHINSON: The witness is answering</p> <p>8 your questions. You just don't like to hear what</p> <p>9 she is saying.</p> <p>10 MR. THORNBURGH: Stop. So -- no, that's</p> <p>11 not true.</p> <p>12 Q. Dr. Benight, whatever sample was analyzed</p> <p>13 on October 5th, 2015, okay, at some point, that --</p> <p>14 after the QUV treatment and after the scanning</p> <p>15 electron microscopy images were done, that sample,</p> <p>16 whatever sample that was that was analyzed using</p> <p>17 FTIR on October 5th, 2015, would have been stored</p> <p>18 somewhere, I assume.</p> <p>19 Where was that sample stored?</p> <p>20 A. In my office.</p> <p>21 Q. Okay. And what do you mean by "in your</p> <p>22 office"?</p> <p>23 A. At Exponent in Menlo Park, California,</p> <p>24 at --</p> <p>25 Q. Okay. Was it --</p>
Page 87	Page 89
<p>1 be processed, embedded, and stained. I cannot open</p> <p>2 a document on the flash drive, it's part of the</p> <p>3 production, entitled: "QUV Oxidized_Mesh No. 4."</p> <p>4 It's likely that it was saved under a</p> <p>5 different file name, hence why you have metadata</p> <p>6 with that date. We conducted FTIR spectra --</p> <p>7 Q. Okay. That's not my --</p> <p>8 A. -- of the QUV oxidized mesh after the QUV</p> <p>9 process had completed.</p> <p>10 And we repeated FTIR spectra on</p> <p>11 October 5th, 2015, in order to save a background</p> <p>12 scan spectrum and also show that the resultant</p> <p>13 spectrum from October 5th, 2015, is the same and</p> <p>14 similar to the spectra acquired after the QUV</p> <p>15 process had been completed.</p> <p>16 Q. Okay. So let's -- so I don't think you</p> <p>17 answered my question, but let's try to move on.</p> <p>18 MR. HUTCHINSON: Hey, Dan. I'm going to</p> <p>19 ask that you --</p> <p>20 MR. THORNBURGH: So hold on. Hold on.</p> <p>21 MR. HUTCHINSON: No, I'm going to ask that</p> <p>22 you stop the commentary of, "So you I don't think</p> <p>23 you have answered my question. I'm just trying to</p> <p>24 piece together stuff."</p> <p>25 If you just succinctly state your</p>	<p>1 A. Oh, I'm not finished.</p> <p>2 Q. Sorry. Go ahead.</p> <p>3 A. At 149 Commonwealth Drive, Menlo Park,</p> <p>4 California --</p> <p>5 Q. Okay.</p> <p>6 A. -- 94025.</p> <p>7 Q. Dr. Benight, what type of container was</p> <p>8 that sample stored in?</p> <p>9 A. It was stored in an aluminum pan with</p> <p>10 another aluminum pan cover on it.</p> <p>11 Q. What was the room temperature?</p> <p>12 A. I don't have a thermometer in my office,</p> <p>13 but the conditions are at ambient conditions.</p> <p>14 Q. How long after the scanning electron</p> <p>15 microscopy was performed -- how long was it stored</p> <p>16 between the -- strike that.</p> <p>17 Let me withdraw that question.</p> <p>18 How long was it stored in your office at</p> <p>19 unknown room temperatures from the date that the</p> <p>20 scanning electron microscopy was done until</p> <p>21 October 5th of 2015?</p> <p>22 A. We performed FTIR spectra on QUV process</p> <p>23 samples after the QUV process had completed and we</p> <p>24 analyzed them with SEM. I believe that that was in</p> <p>25 August or September.</p>

23 (Pages 86 to 89)

Stephanie Benight, Ph.D.

Page 90	Page 92
<p>1 Q. Do you know precisely what date -- strike</p> <p>2 that.</p> <p>3 So there -- so the sample that was</p> <p>4 analyzed using FTIR was sitting in an aluminum</p> <p>5 container in your office for several weeks?</p> <p>6 A. The sample that was recorded with FTIR on</p> <p>7 October 5th, 2015, was a repeat experiment from the</p> <p>8 same batch that was performed after the QUV process</p> <p>9 had finished, and the spectra are similar, sir.</p> <p>10 Q. Did you produce to me the similar FTIR</p> <p>11 spectra that would have been conducted of Sample No.</p> <p>12 4 that was done prior to October 5th of 2015 to</p> <p>13 demonstrate to me that they are similar?</p> <p>14 A. I believe that I did. I cannot open the</p> <p>15 document on the flash drive.</p> <p>16 Q. Okay. So let me ask you this question.</p> <p>17 After the scanning electron microscopy</p> <p>18 work was performed on the QUV-treated samples, what</p> <p>19 samples were sent to be embedded in either paraffin</p> <p>20 or resin?</p> <p>21 A. Samples that had been exposed by QUV and</p> <p>22 samples that had been -- undergone the chemically</p> <p>23 oxidizing protocol given in the IUGA proceedings</p> <p>24 paper authored by Dr. Guelcher, plaintiffs' expert.</p> <p>25 Q. Okay. So let's talk about the QUV-treated</p>	<p>1 that half of that sample could be processed using</p> <p>2 the resin protocol and the other half of that sample</p> <p>3 through paraffin protocol?</p> <p>4 A. I believe so, yes.</p> <p>5 Q. Would that be Sample No. 5, because I</p> <p>6 didn't see any FTIR on Sample No. 5.</p> <p>7 So is it safe to assume that Sample No. 5</p> <p>8 is the sample that was divided in half and treated</p> <p>9 with the paraffin and the resin?</p> <p>10 MR. HUTCHINSON: Object to form. Dan, you</p> <p>11 have asked two questions there.</p> <p>12 BY MR. THORNBURGH:</p> <p>13 Q. Is -- did you understand the question,</p> <p>14 Doctor?</p> <p>15 A. The QUV sample sent to the lab is</p> <p>16 indicated in their paperwork as Sample No. 2.</p> <p>17 Q. Well, this is what I'm trying to</p> <p>18 understand, okay.</p> <p>19 When you received the pristine sample and</p> <p>20 then started to divide the samples up, would you</p> <p>21 have identified each one of those pieces at -- with</p> <p>22 a specific catalog number or identification number?</p> <p>23 A. From the original pristine TVT mesh,</p> <p>24 samples were cut so that they can be exposed to QUV</p> <p>25 oxidation.</p>
Page 91	Page 93
<p>1 samples first, okay?</p> <p>2 A. Okay.</p> <p>3 Q. The -- obviously the specimen -- well, so</p> <p>4 you say -- I think your testimony is all specimens</p> <p>5 that were treated -- all -- strike that.</p> <p>6 I think your testimony is all samples that</p> <p>7 were treated with QUV and intentionally</p> <p>8 photooxidized were sent to be processed either using</p> <p>9 paraffin or resin; is that correct?</p> <p>10 A. Samples from the same batch of QUV</p> <p>11 treatment were sent to Histion for processing,</p> <p>12 embedding, and staining.</p> <p>13 Q. Obviously the sample that was -- that you</p> <p>14 did a repeat FTIR on October 5th, 2015, wasn't a</p> <p>15 sample that was submitted for the paraffin or resin</p> <p>16 processing, correct?</p> <p>17 A. That was a sample exposed in the same QUV</p> <p>18 chamber as the other samples sent to Histion for</p> <p>19 processing, embedding, and staining.</p> <p>20 Q. Okay. How many samples from the QUV</p> <p>21 process were submitted for paraffin and resin</p> <p>22 processing?</p> <p>23 A. I believe that one sample was submitted,</p> <p>24 indicated as Number 2 in the microscopy images.</p> <p>25 Q. And was that sample divided in half so</p>	<p>1 And additional samples were cut so that</p> <p>2 they could undergo -- plaintiffs' expert's protocol,</p> <p>3 Dr. Scott Guelcher, as indicated in his IUGA</p> <p>4 conference proceedings paper.</p> <p>5 In addition, separate pieces were cut to</p> <p>6 represent controls of pristine, out-of-the-box</p> <p>7 Prolene mesh.</p> <p>8 Q. Would -- move to strike. Nonresponsive.</p> <p>9 Would you agree with me that the sample</p> <p>10 size that you -- this is just generally speaking,</p> <p>11 the sample size that you use affects the ultimate</p> <p>12 reliability of your scientific studies and results?</p> <p>13 MR. HUTCHINSON: Object to form.</p> <p>14 THE WITNESS: Can you please repeat the</p> <p>15 question?</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. Would you agree with me that the sample</p> <p>18 size that you as a scientist may use will ultimately</p> <p>19 affect the reliability of your results?</p> <p>20 A. This was a simple set of control</p> <p>21 experiments done to show that intentionally oxidized</p> <p>22 Prolene mesh and investigate whether that stains</p> <p>23 with H&E.</p> <p>24 Q. Well, just tell me generally, as a</p> <p>25 scientist, what they -- what does confidence mean to</p>

24 (Pages 90 to 93)

Stephanie Benight, Ph.D.

Page 94	Page 96
<p>1 you?</p> <p>2 A. I'm not prepared to offer any opinions</p> <p>3 today on that.</p> <p>4 Q. Well, Doctor, just -- I mean, you have a</p> <p>5 Ph.D., right?</p> <p>6 A. I have a Ph.D. in chemistry.</p> <p>7 Q. Okay. And you have worked in a lab for</p> <p>8 several years, right, one and a half years at</p> <p>9 Exponent and several years at Dalton Research Group,</p> <p>10 right?</p> <p>11 A. Exponent is an engineering consulting</p> <p>12 firm. It's true, we do have laboratories.</p> <p>13 I have also worked in an academic research</p> <p>14 lab during my tenure at the University of</p> <p>15 Washington.</p> <p>16 Q. Well, you --</p> <p>17 A. And I also worked in a laboratory while I</p> <p>18 was a postdoc at Stanford University. In addition,</p> <p>19 I worked in a laboratory as an undergraduate</p> <p>20 researcher at Stanford for about two years.</p> <p>21 Q. Okay. So with all that background in mind</p> <p>22 and that experience that you have working at a lab</p> <p>23 as a scientist, in the scientific community, is</p> <p>24 setting out a confidence level part of the</p> <p>25 scientific process when you develop a study?</p>	<p>1 THE WITNESS: In completing studies and</p> <p>2 conducting experiments, I set out to follow the</p> <p>3 scientific method, in that I have a hypothesis and I</p> <p>4 test it.</p> <p>5 BY MR. THORNBURGH:</p> <p>6 Q. Okay. But as part of that study</p> <p>7 development, isn't it important that you identify</p> <p>8 the power part of the scientific process when you</p> <p>9 develop a study? In other words, you want a study</p> <p>10 to be powered, right?</p> <p>11 MR. HUTCHINSON: Object to form.</p> <p>12 Compound.</p> <p>13 BY MR. THORNBURGH:</p> <p>14 Q. Do you understand what I mean, Doctor?</p> <p>15 I mean, you are a scientist. You have</p> <p>16 worked at labs. You have conducted studies. You</p> <p>17 have a Ph.D.</p> <p>18 Do you understand what I mean by</p> <p>19 developing a study that is sufficiently powered?</p> <p>20 MR. HUTCHINSON: Same objection.</p> <p>21 THE WITNESS: I don't understand what you</p> <p>22 mean by "powered."</p> <p>23 BY MR. THORNBURGH:</p> <p>24 Q. Well, do you understand that the greater</p> <p>25 number of samples --</p>
Page 95	Page 97
<p>1 MR. HUTCHINSON: Object to form. Been</p> <p>2 asked and answered, Counsel.</p> <p>3 THE WITNESS: We followed the scientific</p> <p>4 method in the -- in conducting the experiments</p> <p>5 summarized in Dr. MacLean's microscopy report.</p> <p>6 BY MR. THORNBURGH:</p> <p>7 Q. You didn't answer my question, Doctor.</p> <p>8 My question is, when you develop a</p> <p>9 study -- have you ever developed a study, Doctor?</p> <p>10 A. Yes, I have conducted experiments as part</p> <p>11 of a project and/or study.</p> <p>12 Q. And when -- and when you have done that in</p> <p>13 the past, as part of developing the study, did you</p> <p>14 set out a confidence level that you wanted to meet</p> <p>15 in order to establish the reliability of your</p> <p>16 results?</p> <p>17 A. Can you please repeat the question?</p> <p>18 Q. In your experience, your past experience</p> <p>19 in doing studies or experiments -- developing</p> <p>20 experiments or studies, as part of that process,</p> <p>21 isn't it true that you would have set out a</p> <p>22 confidence level as part of the scientific process</p> <p>23 that you undertook?</p> <p>24 MR. HUTCHINSON: Objection. Asked and</p> <p>25 answered.</p>	<p>1 A. Greater than what number of samples?</p> <p>2 Q. Greater than N equals one.</p> <p>3 A. I don't understand the question.</p> <p>4 Q. Would you agree with --</p> <p>5 A. I would like to take a break.</p> <p>6 Q. Hold on. Let me just ask you a question.</p> <p>7 A. Oh, I would like to take a break now.</p> <p>8 MR. HUTCHINSON: Yeah, that's fine,</p> <p>9 Dr. Benight. You can take a break.</p> <p>10 I am going to stand up, too.</p> <p>11 (Whereupon, a brief discussion off the</p> <p>12 record.)</p> <p>13 MR. THORNBURGH: Yeah, we'll go off the</p> <p>14 record. If they are taking a break, we're going to</p> <p>15 go off the record.</p> <p>16 MR. HUTCHINSON: Okay.</p> <p>17 MR. THORNBURGH: We're not counting record</p> <p>18 time when you guys are taking a break.</p> <p>19 MR. HUTCHINSON: Okay, that's fine.</p> <p>20 MR. THORNBURGH: Come on, Chad.</p> <p>21 THE VIDEOGRAPHER: Going off the record at</p> <p>22 2:01.</p> <p>23 (Whereupon, a brief recess was taken.)</p> <p>24 THE VIDEOGRAPHER: Back on the record at</p> <p>25 2:09.</p>

25 (Pages 94 to 97)

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 98</p> <p>1 BY MR. THORNBURGH:</p> <p>2 Q. Doctor, before we went off the record, I</p> <p>3 was asking you some general questions about</p> <p>4 statistical analysis and statistical results and</p> <p>5 confidence intervals and -- and things of that</p> <p>6 nature, including sample size.</p> <p>7 And, Doctor, you know, this deposition is</p> <p>8 going to be public information.</p> <p>9 And so if you were to assume with me that</p> <p>10 a colleague of yours was going to read your</p> <p>11 deposition transcript, are you representing to</p> <p>12 people like your colleagues, who may read your</p> <p>13 deposition transcript, that you do not understand</p> <p>14 what a confidence interval is?</p> <p>15 MR. HUTCHINSON: Object to form. And</p> <p>16 also, Dan, you are telling this witness that this is</p> <p>17 public information. If you handed all the exhibits</p> <p>18 that you have handed, is that -- are -- is that what</p> <p>19 you consider to be public documents?</p> <p>20 MR. THORNBURGH: Well, it may become</p> <p>21 public. I don't know that anybody has moved to --</p> <p>22 to keep this deposition confidential. I don't see</p> <p>23 any proprietary information. But that's besides the</p> <p>24 point.</p> <p>25 MR. HUTCHINSON: Okay. Well, that's my</p>	<p style="text-align: right;">Page 100</p> <p>1 BY MR. THORNBURGH:</p> <p>2 Q. Right. And you understand -- you actually</p> <p>3 do understand what "confidence level" means, right?</p> <p>4 A. Sir, I can't speak to what my colleagues</p> <p>5 would think.</p> <p>6 Q. That wasn't my question.</p> <p>7 My question was, you actually do</p> <p>8 understand what "confidence level" means, don't you?</p> <p>9 A. It's my understanding that confidence</p> <p>10 level has to do with statistics.</p> <p>11 Q. Uh-huh. And you understand that there --</p> <p>12 that -- for example, you understand what 90 -- the</p> <p>13 confidence level of 95 would be or .95, an alpha</p> <p>14 .95? Do you understand what I mean by those terms?</p> <p>15 MR. HUTCHINSON: Object to form. Counsel,</p> <p>16 in what context are you referring to?</p> <p>17 MR. THORNBURGH: Confidence level. The</p> <p>18 confidence level with an alpha of .95.</p> <p>19 Q. Do you understand what that is?</p> <p>20 A. I know that alpha is a Greek letter, and</p> <p>21 if we're talking about confidence intervals, that's</p> <p>22 part of statistics.</p> <p>23 Q. Okay. Well, what is the confidence level</p> <p>24 when the N equals one?</p> <p>25 MR. HUTCHINSON: Object to form.</p>
<p style="text-align: right;">Page 99</p> <p>1 objection to the -- to the question. So why don't</p> <p>2 you remove that, and I'll withdraw my objection.</p> <p>3 BY MR. THORNBURGH:</p> <p>4 Q. Well, if a colleague were to read your --</p> <p>5 let me -- let me ask you this question.</p> <p>6 If Larry Dalton -- you know who Larry</p> <p>7 Dalton is, right?</p> <p>8 A. Larry Dalton was my advisor in graduate</p> <p>9 school.</p> <p>10 Q. Right. And if Larry Dalton was to read</p> <p>11 this deposition transcript, and he read your</p> <p>12 testimony that you don't know what a confidence --</p> <p>13 what confidence level means, would he be -- how do</p> <p>14 you think he would feel about -- well, strike that.</p> <p>15 Would you want -- do you want your</p> <p>16 colleagues or would you want your colleagues to</p> <p>17 believe that you, a scientist who studied both at</p> <p>18 Stanford and at Washington University and at the</p> <p>19 Dalton Research Group, didn't understand what a</p> <p>20 confidence level is?</p> <p>21 MR. HUTCHINSON: Object to form.</p> <p>22 Mischaracterizes her testimony.</p> <p>23 THE WITNESS: I can't speak for the</p> <p>24 opinions of my colleagues, sir, and Larry Dalton has</p> <p>25 always been very proud of me.</p>	<p style="text-align: right;">Page 101</p> <p>1 THE WITNESS: Sir, confidence level has to</p> <p>2 do with statistics. I have --</p> <p>3 BY MR. THORNBURGH:</p> <p>4 Q. In fact, it's actually --</p> <p>5 MR. HUTCHINSON: I'm sorry. Dr. Benight</p> <p>6 was continuing to -- you may not have heard her,</p> <p>7 Dan. That's fine.</p> <p>8 MR. THORNBURGH: I didn't. I didn't.</p> <p>9 MR. HUTCHINSON: She was continuing to</p> <p>10 answer your question.</p> <p>11 So, Dr. Benight, go ahead.</p> <p>12 MR. THORNBURGH: And I'm sorry. And part</p> <p>13 of the problem of doing it by phone is I don't get</p> <p>14 to see your mouth or your movement, so it's</p> <p>15 difficult.</p> <p>16 MR. HUTCHINSON: That's fine.</p> <p>17 BY MR. THORNBURGH:</p> <p>18 Q. I don't mean to speak over you, Doctor.</p> <p>19 MR. HUTCHINSON: I tell you, that's fine.</p> <p>20 No big deal. No big deal. I'm just letting the</p> <p>21 doctor finish her answer.</p> <p>22 THE WITNESS: 95 percent -- what you are</p> <p>23 referring to as confidence is part of statistics.</p> <p>24 BY MR. THORNBURGH:</p> <p>25 Q. Yeah, and you can't actually do a</p>

Stephanie Benight, Ph.D.

Page 102	Page 104
<p>1 statistical analysis comparative or statistical 2 analysis with an N of one, correct? 3 MR. HUTCHINSON: Object to form. 4 THE WITNESS: We didn't perform any 5 statistical analysis as part of this investigation 6 that was summarized in Dr. MacLean's report. 7 BY MR. THORNBURGH: 8 Q. Right. And the reason that you didn't, -- 9 in fact -- strike that. 10 It would be impossible to do a statistical 11 analysis with only one sample, correct? 12 MR. HUTCHINSON: Object to form. 13 THE WITNESS: The experiments that we 14 carried out were a simple set of control experiments 15 to investigate whether intentionally oxidized 16 Prolene mesh stains with H&E. 17 MR. THORNBURGH: Madam Court Reporter, can 18 you read back my question? 19 Q. And then, Dr. Benight, listen to the 20 question that she reads back and try to answer that 21 question only, okay? 22 (Whereupon, the reporter read the record 23 as follows: 24 "Question: It would be impossible to do a 25 statistical analysis with only one sample,</p>	<p>1 sent to Histon, you cannot perform a statistical 2 analysis when the N equals 1, one sample, right? 3 MR. HUTCHINSON: Object to form. 4 THE WITNESS: Sir, we didn't perform any 5 statistical analysis as part of this investigation. 6 BY MR. THORNBURGH: 7 Q. Well, can you tell me what your confidence 8 level, had you performed a statistical analysis, 9 would have been for the single UV-treated sample 10 that was sent to Histon? 11 A. Sir, we didn't perform any statistical 12 analysis as part of this investigation. This 13 investigation was a simple set of control 14 experiments done to investigate whether 15 intentionally oxidized Prolene stains with H&E. 16 These experiments were done because 17 plaintiffs' experts, Dr. Iakovlev and Dr. Guelcher, 18 did not perform these control experiments as part of 19 their reports. 20 Q. There is no way to calculate power 21 regarding the UV-treated single sample that was sent 22 for -- to Histon for processing, correct? 23 A. If by "power," you mean part of a 24 statistical analysis, we didn't conduct any 25 statistical analysis as part of this investigation.</p>
Page 103	Page 105
<p>1 correct?") 2 THE WITNESS: We didn't carry out any 3 statistical analysis as part of our investigation to 4 see whether intentionally oxidized Prolene mesh 5 stains. 6 BY MR. THORNBURGH: 7 Q. I understand. If I would have wanted to 8 know that answer, I would have asked my question a 9 little bit differently. But my question was very 10 specific. 11 My question is, you can't perform a 12 statistical analysis when you only have one sample? 13 MR. HUTCHINSON: Object to form. 14 THE WITNESS: We submitted several 15 different samples for processing at Histon. 16 BY MR. THORNBURGH: 17 Q. You -- well, you only submitted -- you 18 testified earlier that you only submitted one 19 UV-treated sample, right? 20 A. Oh, if you are talking about specifically 21 UV-treated sample, we submitted one UV-treated 22 sample to Histon for processing, embedding, and 23 staining. 24 Q. Right. And so my question to you, as it 25 relates to the UV-treated single specimen that was</p>	<p>1 Q. Prior to the study, did anybody define for 2 you the power that they wanted prior to performing 3 any testing of the QUV-treated experiment? 4 A. I don't understand what you mean by 5 "power," sir. 6 Q. Okay. So let's look at the single 7 sample -- well, let's strike that. 8 Let's look at the Histon workbook -- or 9 the Histon exhibit -- document. I think it was -- 10 I think it was marked Exhibit No. 1. 11 A. In front of me I have two Histon 12 documents, Exhibit No. 4, Histon histopathology 13 project plan, Amendment 1, pertaining to Histon 14 Study No. H15-118, page 1 of 5. 15 And as Exhibit 5, I also have a Histon 16 chain of custody form pertaining to Study No. 17 H15-118. 18 Q. Hold on one second. Let me just try to 19 find my document. 20 Okay. So I think you said that you have 21 two Histon documents in front of you; is that 22 right? 23 A. Currently, yes. 24 Q. Okay. Are there -- are there any other 25 additional Histon documents that you are aware of,</p>

27 (Pages 102 to 105)

Stephanie Benight, Ph.D.

Page 106	Page 108
<p>1 other than the two that are in front of you?</p> <p>2 A. I believe that there is another QC record</p> <p>3 that I currently don't have in front of me.</p> <p>4 Q. By "QC," do you mean quality -- what does</p> <p>5 "QC" mean?</p> <p>6 A. Quality control is my understanding.</p> <p>7 MR. HUTCHINSON: And just so the record</p> <p>8 reflects, you don't have a hardcopy of that in front</p> <p>9 of you, correct?</p> <p>10 THE WITNESS: Oh, no, but it is included</p> <p>11 on the production.</p> <p>12 MR. HUTCHINSON: Okay. Since Dan --</p> <p>13 MR. THORNBURGH: Well --</p> <p>14 MR. HUTCHINSON: Since Dan is not here, he</p> <p>15 couldn't tell whether the flash drives were in front</p> <p>16 of you or not, and I was just trying to make the</p> <p>17 record clear.</p> <p>18 BY MR. THORNBURGH:</p> <p>19 Q. Okay. So what I have in front of me is</p> <p>20 a -- I only have two -- strike that.</p> <p>21 I have two documents that were produced to</p> <p>22 me that appear to be documents that came from</p> <p>23 Histon.</p> <p>24 A. Okay.</p> <p>25 Q. I only have two?</p>	<p>1 you would want to ask her whether or not that is on</p> <p>2 the flash drive that is in front of her right now.</p> <p>3 MR. THORNBURGH: Well I don't know what</p> <p>4 flash drive is in front of her.</p> <p>5 MR. HUTCHINSON: Okay. The flash drive is</p> <p>6 Exhibits No. 6, 7, and 8.</p> <p>7 MR. THORNBURGH: Okay.</p> <p>8 Q. Which -- which document has the quality</p> <p>9 control, the QC Histon document, which exhibit</p> <p>10 number?</p> <p>11 A. I believe it's Exhibit No. 6, and I am</p> <p>12 putting that into the court reporter's computer now.</p> <p>13 Q. Let's do this, okay. I don't want to</p> <p>14 waste too much time.</p> <p>15 Let's look at the two Histon documents</p> <p>16 that you have in front of you first, okay?</p> <p>17 A. Okay.</p> <p>18 Q. All right. So the first one, does it say</p> <p>19 "Staining Log" at the very top?</p> <p>20 A. No. Exhibit No. 4 that I have says</p> <p>21 "Histon Histopathology Project Plan," and Exhibit</p> <p>22 No. 5 has chain of custody cover page pertaining to</p> <p>23 Study No. H15-118.</p> <p>24 I am opening the thumb drive that is, I</p> <p>25 believe, Exhibit No. 6, where I believe the document</p>
Page 107	Page 109
<p>1 A. Okay.</p> <p>2 Q. I don't know what the QC document is, and</p> <p>3 I haven't seen it before.</p> <p>4 A. That was included on the production given</p> <p>5 to you prior to Dr. MacLean's testimony.</p> <p>6 Q. Okay. So -- well, that's what your --</p> <p>7 that's what you believe was given to me prior to</p> <p>8 Dr. MacLean's deposition, right?</p> <p>9 MR. HUTCHINSON: Hey, Dan, please do not</p> <p>10 argue with the witness.</p> <p>11 MR. THORNBURGH: I'm not. I'm just -- for</p> <p>12 the record, I mean, how does she know what was given</p> <p>13 to me?</p> <p>14 MR. HUTCHINSON: Well, because she --</p> <p>15 THE WITNESS: It's an exhibit, sir.</p> <p>16 MR. HUTCHINSON: Hold --</p> <p>17 MR. THORNBURGH: All right. So that's not</p> <p>18 my --</p> <p>19 MR. HUTCHINSON: Hey, Dan, listen to me.</p> <p>20 Just -- I know it's difficult, but you are going to</p> <p>21 get through it.</p> <p>22 The flash drives that are in front of you</p> <p>23 contain -- that are in front of the witness, rather,</p> <p>24 contain documents.</p> <p>25 And I think it would be helpful if maybe</p>	<p>1 you were referring to is.</p> <p>2 Q. Okay. I -- so I think I hear what you are</p> <p>3 saying.</p> <p>4 The project plan, is that a document that</p> <p>5 is being produced to me, to -- to the best of your</p> <p>6 knowledge, for the first time today?</p> <p>7 A. No, I believe that's been produced to you</p> <p>8 before today.</p> <p>9 Q. Okay. What does -- what does the project</p> <p>10 plan look like?</p> <p>11 A. It has five pages. On the first page it</p> <p>12 says, "Histon Histopathology Project Plan,</p> <p>13 Amendment 1." And it says, "Histon Study No.</p> <p>14 H15-118."</p> <p>15 On the second page, there are two</p> <p>16 signatures, one of Peggy Lalor, Ph.D., of Histon</p> <p>17 LLC, and another of Mariana Garcia, Ph.D. of</p> <p>18 Exponent.</p> <p>19 And it has different sections. Section</p> <p>20 2.0 says, "Introduction and Scope."</p> <p>21 And it says, "Mesh implants will be</p> <p>22 provided for slide preparation to determine if H&E</p> <p>23 stain will stain the materials. Samples will be</p> <p>24 shipped to Histon for processing." And then there</p> <p>25 is a Table 1 of the samples received.</p>

28 (Pages 106 to 109)

Stephanie Benight, Ph.D.

Page 110	Page 112
<p>1 There is a next section of 3.0, 2 "Compliance Statement." There's a Section -- 3 Q. Okay. 4 A. -- No. 4.0 of tissue processing and 5 evaluation methods. 6 And there is a couple subsections under 7 Section 4 that includes the paraffin processing 8 protocol and the Technovit processing protocol, as 9 well as the staining protocols. 10 And then there is Section No. 5, 11 "Archiving and Disposition of Study-Related 12 Materials," and Section No. 6, which is an amendment 13 justification saying that "added a control tissue to 14 verify staining by H&E." 15 Q. Okay. 16 A. And that's page 5 of the document. That's 17 the end of the document. 18 Q. Okay. So I'm going to represent to you 19 that that document has never been produced to me 20 prior to today. 21 MR. HUTCHINSON: Dan, I'm -- 22 MR. THORNBURGH: Chad, if you believe 23 otherwise, that's fine. I don't have -- 24 MR. HUTCHINSON: Okay. I'm sorry. I'm 25 just going to object to the form. I think it</p>	<p>1 project plan, was produced to you on whatever e-mail 2 that I sent you responding to your document 3 requests. 4 MR. THORNBURGH: I have it. Okay. 5 So let's go ahead and mark also the 6 Document No. 3 that I gave to the court reporter, 7 which is the staining log as Exhibit -- the next 8 exhibit, which I believe is Exhibit No. 17. 9 (Whereupon, a brief discussion off the 10 record.) 11 (Whereupon, Exhibit 17 was marked for 12 identification.) 13 BY MR. THORNBURGH: 14 Q. Okay. So Exhibit No. 4, 5, and 17 would 15 be the documents -- all the documents that you 16 have -- strike that. 17 Yeah, Exhibit No. 4, 5, and 17 would be 18 all documents that you have in your possession from 19 Histion; is that correct? 20 A. Yes, those documents are from Histion. 21 Q. Okay. So if we look at Exhibit No. 4, 22 which is the Histion project plan, Amendment 1? 23 A. Okay. 24 Q. Was there a prior amendment? Was there a 25 prior document?</p>
Page 111	Page 113
<p>1 mischaracterizes the evidence. 2 MR. THORNBURGH: So -- 3 MR. HUTCHINSON: And the witness, as we 4 sit here now, is trying to look on the flash drive 5 right now. 6 MR. THORNBURGH: I'm going to go look at 7 Exhibit No. -- Exhibit No. 5 to Dr. MacLean's 8 deposition, which is Exhibit -- should be Exhibit 9 No. -- 10 MR. HUTCHINSON: Oh, I know what you are 11 talking about. We're talking about the Histion 12 project plan? 13 MR. THORNBURGH: Yes. 14 MR. HUTCHINSON: Okay. Yeah. That's what 15 I sent to you in my e-mail, remember? I attached 16 that to my e-mail to you when I responded to your 17 seven document requests. That's when I produced 18 that document to you. 19 MR. THORNBURGH: Okay. Okay. 20 MR. HUTCHINSON: I'm sorry. Are we on the 21 same page now? 22 MR. THORNBURGH: I think we are. 23 MR. HUTCHINSON: Okay. Completely my bad. 24 So just so we're clear, Exhibit 4, which 25 is a histo -- I'm sorry, a Histion histopathology</p>	<p>1 A. Yes. All amendments are in red in this 2 Amendment 1 document. 3 Q. Okay. Great. And if you -- on Exhibit 4, 4 if you turn with me to page 3? 5 A. Okay. 6 Q. It says, "Sample Description." 7 A. Oh, okay. 8 Q. Okay. So -- so this indicates that 9 Histion received an exemplar mesh on August 20th, 10 2015, a QV-oxidized mesh on August 20th of 2015, a 11 chemical-treated mesh or chemically oxidized mesh 12 that says, "To be determined," and then a control 13 tissue that says "NA." 14 Do you see that? 15 A. Yes. 16 Q. And there are -- on the right column on 17 page -- of this page, under Section 2.0, is the 18 processing instructions, right? 19 A. Yes. 20 Q. Okay. So I have a couple questions 21 regarding this. 22 So there was one sample for -- as you 23 testified earlier, there is one QUV oxidized mesh 24 sample. Half of that was -- that was divided in 25 half; half of it was the paraffin process half and</p>

29 (Pages 110 to 113)

Stephanie Benight, Ph.D.

Page 114	Page 116
<p>1 the other half was the Technovit resin process.</p> <p>2 Is that correct?</p> <p>3 A. Yes.</p> <p>4 Q. And you -- is it -- am I -- is it fair to</p> <p>5 say that you are not -- well, strike that.</p> <p>6 Let me ask -- let me try to understand a</p> <p>7 little bit.</p> <p>8 And I know we talked about this a little</p> <p>9 bit earlier. We talked about how the exemplar was</p> <p>10 divided up into different pieces of mesh.</p> <p>11 Some of that mesh was treated using QUV</p> <p>12 photooxidation, some of that was treated with</p> <p>13 chemicals to try to oxidize it, and then some of it</p> <p>14 was untreated, right?</p> <p>15 MR. HUTCHINSON: Object to form.</p> <p>16 THE WITNESS: If you are referring to the</p> <p>17 untreated mesh as out-of-the-box Prolene mesh, then</p> <p>18 yes.</p> <p>19 BY MR. THORNBURGH:</p> <p>20 Q. Now, I'm just trying to figure out from</p> <p>21 the exemplar that you got and you -- you cut it into</p> <p>22 pieces, trying to figure out how many pieces you cut</p> <p>23 that into and then how many of those pieces were</p> <p>24 sent to Histion.</p> <p>25 It seems to me, based on what we have seen</p>	<p>1 the witness a computer and, number two, the court</p> <p>2 reporter's computer does not have, as we discussed</p> <p>3 earlier, the appropriate software to open up one of</p> <p>4 the documents.</p> <p>5 BY MR. THORNBURGH:</p> <p>6 Q. But, Dr. Benight, you were part of that</p> <p>7 process of cutting that exemplar into pieces, right?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. And do you recall how many pieces</p> <p>10 you cut off of the exemplar to create or use as</p> <p>11 samples in your various experiments?</p> <p>12 MR. HUTCHINSON: Same objections.</p> <p>13 THE WITNESS: We cut the TVT mesh into</p> <p>14 different sets of samples, one for -- to be a</p> <p>15 control exemplar mesh sample, others to be exposed</p> <p>16 to QUV irradiation prior to processing, embedding,</p> <p>17 and staining.</p> <p>18 And another set was cut and subjected to</p> <p>19 Dr. Guelcher's protocol, which involves a Cobalt(II)</p> <p>20 chloride solution for -- said to be chemically</p> <p>21 oxidizing.</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. Did each one of those samples that were</p> <p>24 cut get a identification number assigned to it by</p> <p>25 you or by Exponent?</p>
Page 115	Page 117
<p>1 today so far, is that at least -- I think probably</p> <p>2 at most there were three QUV-treated samples, and</p> <p>3 one of those samples was sent to Histion?</p> <p>4 MR. HUTCHINSON: Object to form.</p> <p>5 THE WITNESS: A QUV oxidized mesh sample</p> <p>6 was sent to Histion.</p> <p>7 BY MR. THORNBURGH:</p> <p>8 Q. Okay. Do you know how -- I mean, can</p> <p>9 you -- sitting right here, can you tell me how many</p> <p>10 samples were treated with QUV? Do you know the</p> <p>11 answer to that?</p> <p>12 MR. HUTCHINSON: Dan, I'm going to object</p> <p>13 to the extent you have already asked and answered</p> <p>14 that -- you have already question a plethora of</p> <p>15 times already.</p> <p>16 MR. THORNBURGH: I understand that, but I</p> <p>17 never really had -- got an answer for that question.</p> <p>18 So I'm just trying to figure it out.</p> <p>19 MR. HUTCHINSON: I understand that.</p> <p>20 And let the record reflect that are you</p> <p>21 asking a witness specific question about documents</p> <p>22 that may be on the three flash drives that we have</p> <p>23 produced to you before this deposition.</p> <p>24 And the witness cannot open up any of the</p> <p>25 flash drives because, number one, you didn't provide</p>	<p>1 A. A sample from -- those that were cut from</p> <p>2 the TVT mesh, samples were then treated in the</p> <p>3 oxidation protocols previously outlined before they</p> <p>4 were sent to Histion lab for processing.</p> <p>5 Q. Okay. Listen, I'm -- maybe you are tired</p> <p>6 or maybe you are hungry.</p> <p>7 My question was, did you or Exponent</p> <p>8 assign to each one of those pieces of mesh an</p> <p>9 identification number so that you could follow that</p> <p>10 sample from the different steps in the experiment</p> <p>11 that were conducted?</p> <p>12 MR. HUTCHINSON: Object to form. Dan,</p> <p>13 please do not argue with the witness. I have asked</p> <p>14 you that before. If we do it again, this deposition</p> <p>15 is over. Do you understand me?</p> <p>16 MR. THORNBURGH: Chad, I'm -- Chad, I'm</p> <p>17 not. Chad, I'm not. I'm really not.</p> <p>18 MR. HUTCHINSON: Hey, do you understand</p> <p>19 me?</p> <p>20 MR. THORNBURGH: My tone is level. I'm</p> <p>21 not arguing with the witness. I just -- I just want</p> <p>22 her to listen to my question and answer my question.</p> <p>23 MR. HUTCHINSON: I understand that, but</p> <p>24 I'm asking if you understand me.</p> <p>25 MR. THORNBURGH: I understand your</p>

30 (Pages 114 to 117)

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 118</p> <p>1 unreasonable request, yes.</p> <p>2 MR. HUTCHINSON: No, my question is not</p> <p>3 unreasonable. Do not argue with the witness again.</p> <p>4 I'm asking, do you understand me?</p> <p>5 BY MR. THORNBURGH:</p> <p>6 Q. Dr. Benight, when those samples were cut</p> <p>7 into individual pieces -- strike that.</p> <p>8 When the mesh exemplar was divided into</p> <p>9 individual samples, did you record that process of</p> <p>10 cutting that mesh and dividing it into pieces</p> <p>11 somewhere that I can go to, to look at what was done</p> <p>12 during that process?</p> <p>13 A. Each of the samples cut was either exposed</p> <p>14 to the chemical oxidation protocol as stipulated by</p> <p>15 Dr. Guelcher or it was used as an exemplar mesh for</p> <p>16 a control sample or it was exposed to QUV</p> <p>17 irradiation.</p> <p>18 Q. Okay.</p> <p>19 A. And then samples from each of those</p> <p>20 batches were then processed, sent to Histion for</p> <p>21 processing, embedding, and staining.</p> <p>22 Q. Okay.</p> <p>23 MR. THORNBURGH: Madam Court Reporter, I</p> <p>24 sent some exhibits -- or documents over today. I</p> <p>25 think you said that you had those and printed them</p>	<p style="text-align: right;">Page 120</p> <p>1 Are we ready to go?</p> <p>2 THE WITNESS: I have Exhibit 18 in front</p> <p>3 of me.</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. Okay. Great. Now, Dr. Benight, I'll</p> <p>6 represent to you that this is a lab notebook that</p> <p>7 was produced by Dr. Ong in the Lewis versus Ethicon</p> <p>8 litigation, okay.</p> <p>9 Do you know who Dr. Ong is?</p> <p>10 A. Dr. Kevin Ong, I believe he is an Exponent</p> <p>11 employee based out of our Philadelphia office.</p> <p>12 Q. Okay. And this was represented by Dr. Ong</p> <p>13 to be the Exponent lab notebooks that were -- that</p> <p>14 are used by Exponent scientists, okay? And do you</p> <p>15 see how it says "Exponent" on the top left-hand</p> <p>16 corner?</p> <p>17 A. I see "Exponent" at the top left-hand</p> <p>18 corner.</p> <p>19 MR. HUTCHINSON: Object to form of the</p> <p>20 last question.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. Okay. Okay. And do you see there is a</p> <p>23 project name, there is a project number, and then</p> <p>24 there is an author of the document and a date of the</p> <p>25 document identified?</p>
<p style="text-align: right;">Page 119</p> <p>1 out.</p> <p>2 (Whereupon, a discussion off the record.)</p> <p>3 MR. THORNBURGH: Let's go ahead and mark</p> <p>4 the Ong 14 as Exhibit No. 18.</p> <p>5 (Whereupon, a brief discussion off the</p> <p>6 record.)</p> <p>7 (Whereupon, Exhibit 18 was marked for</p> <p>8 identification.)</p> <p>9 MR. HUTCHINSON: Dan, did you send another</p> <p>10 copy for me?</p> <p>11 MR. THORNBURGH: Well, I asked for two</p> <p>12 copies of each of those to be -- well, I asked for</p> <p>13 two copies of Exhibit 18 to be printed. I don't</p> <p>14 know that the court reporter printed two copies.</p> <p>15 MR. HUTCHINSON: Okay.</p> <p>16 (Whereupon, a brief discussion off the</p> <p>17 record.)</p> <p>18 MR. THORNBURGH: I'm just going to ask</p> <p>19 some general sort of questions about this document.</p> <p>20 MR. HUTCHINSON: Okay. Well, I may --</p> <p>21 here I may just -- in an effort to speed this along,</p> <p>22 I may just get a copy of it later if I need to.</p> <p>23 MR. THORNBURGH: Okay. Okay.</p> <p>24 THE REPORTER: Sorry.</p> <p>25 MR. THORNBURGH: It's okay.</p>	<p style="text-align: right;">Page 121</p> <p>1 A. Yes.</p> <p>2 Q. Okay. Have you ever been provided with a</p> <p>3 lab notebook like the one marked as Exhibit No. 18</p> <p>4 from Exponent or by Exponent?</p> <p>5 A. I have seen this stationery before.</p> <p>6 Q. Okay. Is it -- are you -- are you</p> <p>7 testifying -- are you representing that this is not</p> <p>8 a lab notebook?</p> <p>9 MR. HUTCHINSON: Object to form.</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. Because I'm going to tell you Dr. Ong,</p> <p>12 Kevin Ong, another Exponent employee and expert for</p> <p>13 Ethicon, has represented that this is the Exponent</p> <p>14 lab notebook that scientists are provided to record</p> <p>15 their research and experiments, okay?</p> <p>16 MR. HUTCHINSON: I'm sorry, Dan, is that a</p> <p>17 question?</p> <p>18 MR. THORNBURGH: So -- yeah.</p> <p>19 Q. So are you -- are you testifying different</p> <p>20 than what Dr. Ong has testified to, that this is</p> <p>21 really not a lab notebook, but it's just stationery?</p> <p>22 MR. HUTCHINSON: Same objection.</p> <p>23 Argumentative. Also object to the extent you are</p> <p>24 asking the witness to interpret the testimony of</p> <p>25 Dr. Ong without handing her the documents.</p>

Stephanie Benight, Ph.D.

Page 122	Page 124
<p>1 You can answer.</p> <p>2 MR. THORNBURGH: She has the -- she has</p> <p>3 the document in front of her.</p> <p>4 MR. HUTCHINSON: I'm talking about the --</p> <p>5 I'm talking about the testimony, Counsel.</p> <p>6 MR. THORNBURGH: All right. So --</p> <p>7 MR. HUTCHINSON: You can answer.</p> <p>8 THE WITNESS: This looks to be a record of</p> <p>9 experiments performed written down in handwriting.</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. Okay. And you were not provided with a</p> <p>12 similar document, right, to use as a lab notebook</p> <p>13 for your experiment that you conducted in this case,</p> <p>14 correct?</p> <p>15 A. I provided a record of all of the</p> <p>16 experimentation performed in electronic format to</p> <p>17 you, sir.</p> <p>18 Q. Okay. So let's look at the first page of</p> <p>19 Exhibit No. 18.</p> <p>20 Do you see that?</p> <p>21 A. Yes. I'm on the first page.</p> <p>22 Q. Okay. Do you see that this Exponent</p> <p>23 scientist writes on the day of this experiment that</p> <p>24 he "will be performing optical microscopy on the</p> <p>25 exemplar mesh that we received, Exponent Evidence ID</p>	<p>1 A. It's likely that we did, yes.</p> <p>2 Q. Okay. And where is that evidence ID</p> <p>3 number identified? Where would that have been</p> <p>4 recorded?</p> <p>5 A. As part of our internal QA system.</p> <p>6 Q. Okay. And do you see how they did</p> <p>7 scanning electron microscopy of certain areas on</p> <p>8 their exemplar?</p> <p>9 A. I don't see a reference to SEM. I see a</p> <p>10 reference to high-resolution photography --</p> <p>11 Q. Sorry, the optical --</p> <p>12 A. -- and then numbered circles on the</p> <p>13 drawing.</p> <p>14 Q. You see where they identified the areas of</p> <p>15 the exemplar that would be looked at using</p> <p>16 high-resolution photography?</p> <p>17 A. I see some labels to that extent, yes.</p> <p>18 Q. Okay. Did you label the pieces of mesh</p> <p>19 that you divided from the exemplar and give it a</p> <p>20 specific labeling identification number?</p> <p>21 A. Each of the samples that we cut were then</p> <p>22 either exposed to QUV, chemically oxidized protocol,</p> <p>23 or used as an exemplar for the experiments that are</p> <p>24 summarized in Dr. MacLean's report.</p> <p>25 Q. Well, how do I know what sample the QUV --</p>
Page 123	Page 125
<p>1 number."</p> <p>2 You see there is an ID number for the</p> <p>3 evidence, you see that?</p> <p>4 A. Yes.</p> <p>5 Q. Okay. It says, "The exemplar consists of</p> <p>6 a blue propylene mesh that is attached to two curved</p> <p>7 metal ends. See picture. The mesh has a protective</p> <p>8 sheath surrounding it with a split down."</p> <p>9 Do you see that?</p> <p>10 A. Yes.</p> <p>11 Q. It says, "High-resolution photographs were</p> <p>12 taken of each numbered circle with a sheath still on</p> <p>13 it." Then it says, "Picture" -- "Pictures labeled."</p> <p>14 See that?</p> <p>15 A. Yes.</p> <p>16 Q. Okay. So when -- I have a number of</p> <p>17 different questions related to this document.</p> <p>18 When you received the exemplar, did you</p> <p>19 understand that that exemplar would be evidence in</p> <p>20 this case?</p> <p>21 A. Yes.</p> <p>22 Q. Okay. And did you or somebody at Exponent</p> <p>23 assign to the exemplar an evidence ID number, as was</p> <p>24 done on September 21st, 2013, in the Lewis versus</p> <p>25 Ethicon experiment?</p>	<p>1 what -- strike that.</p> <p>2 How do I know which QUV sample was sent to</p> <p>3 Histon to be processed?</p> <p>4 A. Well, all of the samples that were</p> <p>5 processed by QUV were in the same QUV chamber and</p> <p>6 exposed similarly, and the SEM images of the samples</p> <p>7 that were exposed looked similar.</p> <p>8 So one of those samples that represents</p> <p>9 the batch was sent to Histon.</p> <p>10 Q. I'm just trying to understand which sample</p> <p>11 was sent, and I think I understand.</p> <p>12 A. And I'm --</p> <p>13 Q. If the -- if the answer is no, they</p> <p>14 weren't given identification numbers, and I don't</p> <p>15 know which sample was sent, but I know that the</p> <p>16 sample's from the QUV treatment batch, then</p> <p>17 that's -- then I understand that, but I need to</p> <p>18 know --</p> <p>19 MR. HUTCHINSON: I'm sorry, Dan, is that a</p> <p>20 question? Can you rephrase your question, please?</p> <p>21 MR. THORNBURGH: Yeah, I --</p> <p>22 MR. HUTCHINSON: Just rephrase your</p> <p>23 question. I think that would be helpful for the</p> <p>24 witness.</p> <p>25</p>

32 (Pages 122 to 125)

Stephanie Benight, Ph.D.

Page 126	Page 128
<p>1 BY MR. THORNBURGH:</p> <p>2 Q. My question is, I had -- I think I had a</p> <p>3 couple questions that just haven't been answered.</p> <p>4 One is, did you provide each sample with an</p> <p>5 identification number?</p> <p>6 Do you -- let me ask this question. Let</p> <p>7 me withdraw the last one.</p> <p>8 What is the importance of identifying</p> <p>9 samples with identification numbers?</p> <p>10 A. An identification number is used to</p> <p>11 identify samples. Also, naming of the samples is a</p> <p>12 way to identify samples.</p> <p>13 Q. Okay. So is it -- is it fair to say that</p> <p>14 neither you nor Exponent gave each sample that was</p> <p>15 treated in QUV a sample identification number?</p> <p>16 A. We numbered them 1 through 6, as I believe</p> <p>17 we discussed earlier.</p> <p>18 Q. Okay. So which sample, from 1 to 6, was</p> <p>19 sent to Histion for the pathology -- histopathology</p> <p>20 experiment?</p> <p>21 You do understand that there is a question</p> <p>22 pending, right?</p> <p>23 A. Yes, sir.</p> <p>24 Q. Okay. Just -- I assume you were just</p> <p>25 looking, trying to -- trying to answer the question?</p>	<p>1 under the same conditions was sent to Histion for</p> <p>2 processing, embedding, and staining.</p> <p>3 Q. Well, how -- but how do I know that? How</p> <p>4 do I know that you sent a sample from the QUV batch</p> <p>5 to Histion? Where is the documentation that</p> <p>6 supports that?</p> <p>7 MR. HUTCHINSON: Object to form. Compound</p> <p>8 question. Counsel, will you withdraw that question,</p> <p>9 please?</p> <p>10 MR. THORNBURGH: No.</p> <p>11 MR. HUTCHINSON: Okay.</p> <p>12 THE WITNESS: It's in the chain of custody</p> <p>13 record at Histion.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. Yeah. But how do I know from looking at</p> <p>16 Exponent's records that a sample that was treated</p> <p>17 from QUV was actually a sample that was provided to</p> <p>18 Histion?</p> <p>19 MR. HUTCHINSON: Objection. Speculation.</p> <p>20 Counsel, if you will rephrase the question and stop</p> <p>21 from asking, "How do -- how would I know," that</p> <p>22 would be very helpful.</p> <p>23 MR. THORNBURGH: No. No, I think it is a</p> <p>24 very important question, and I think the Court would</p> <p>25 think it's an important question. I need to be able</p>
Page 127	Page 129
<p>1 A. Oh, yes, sir.</p> <p>2 Q. Okay. Great.</p> <p>3 A. From the samples that were sent back, it</p> <p>4 appears that QUV oxidized Sample No. 2 was sent to</p> <p>5 Histion.</p> <p>6 Q. Okay. So your testimony is Sample No. 2</p> <p>7 was sent to Histion, right?</p> <p>8 A. Yes.</p> <p>9 Q. Okay. And if you look at the scanning</p> <p>10 electron microscopy that was performed on the QUV --</p> <p>11 the samples -- and you recall that, right? We did</p> <p>12 that -- went through that process of looking at</p> <p>13 those SEM images?</p> <p>14 MR. HUTCHINSON: Object to form.</p> <p>15 THE WITNESS: Yes, yes.</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. Okay. And we were able to tell from that</p> <p>18 process that we did, that line of questioning, that</p> <p>19 the samples that were looked at using SEM images</p> <p>20 from the batch that was treated in the QUV or</p> <p>21 UV-treated specimens was Sample No. 4, 5, and 6,</p> <p>22 right?</p> <p>23 Let me -- let me ask -- let me --</p> <p>24 A. A sample that was from the representative</p> <p>25 batch of samples all exposed in the same QUV chamber</p>	<p>1 to track which QUV sample was provided to Histion</p> <p>2 for the experiment.</p> <p>3 MR. HUTCHINSON: And --</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. And so my question is to you, what</p> <p>6 internal Exponent record identifies which of the QUV</p> <p>7 samples was provided to Histion?</p> <p>8 A. A sample from the batch of samples that</p> <p>9 were exposed in the same QUV chamber. One sample</p> <p>10 from that batch was sent to Histion for processing.</p> <p>11 Q. But how do I know that?</p> <p>12 A. I have testified to that, sir.</p> <p>13 Q. So the only way for me to know that a</p> <p>14 sample from the QUV batch was sent to Histion for</p> <p>15 processing is from your testimony today?</p> <p>16 MR. HUTCHINSON: Dan, I am going to object</p> <p>17 to the extent, Dan, the witness has already answered</p> <p>18 your question. She testified that Sample No. 2 --</p> <p>19 MR. THORNBURGH: Chad.</p> <p>20 MR. HUTCHINSON: -- was sent to Histion.</p> <p>21 MR. THORNBURGH: Chad.</p> <p>22 MR. HUTCHINSON: Yes.</p> <p>23 MR. THORNBURGH: My question is which --</p> <p>24 Chad, quit coaching the witness.</p> <p>25 MR. HUTCHINSON: I'm not coaching the</p>

33 (Pages 126 to 129)

Stephanie Benight, Ph.D.

Page 130	Page 132
<p>1 witness.</p> <p>2 MR. THORNBURGH: My -- but that's a</p> <p>3 document that is on a Histon document.</p> <p>4 Q. My question is, what Exponent document</p> <p>5 tells me and ensures to me that a QUV-treated sample</p> <p>6 is a sample that was actually provided to Histon?</p> <p>7 A. As I have said, a sample from the samples</p> <p>8 that were exposed to QUV processing, a sample from</p> <p>9 that batch was sent to Histon. FTIR and SEM was</p> <p>10 also done on more than one of those samples in that</p> <p>11 batch.</p> <p>12 That sample was documented in the Histon</p> <p>13 chain of custody as being received by them under</p> <p>14 Study No. H15-118.</p> <p>15 Q. Yeah, but -- yeah, but --</p> <p>16 A. And I actually would like to take a break</p> <p>17 and eat some lunch.</p> <p>18 Q. Okay. We can take a break, but, you know,</p> <p>19 I have a question I think that is pending but hasn't</p> <p>20 been answered yet.</p> <p>21 MR. HUTCHINSON: Oh.</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. And that is -- so I would like to have</p> <p>24 just this one question be answered before we take</p> <p>25 the break.</p>	<p>1 MR. THORNBURGH: Okay. We'll take a</p> <p>2 break.</p> <p>3 THE VIDEOGRAPHER: This is the end of Tape</p> <p>4 No. 2. Going off the record at 2:55.</p> <p>5 (Whereupon, a brief recess was taken.)</p> <p>6 THE VIDEOGRAPHER: This is the beginning</p> <p>7 of Tape No. 3 in the deposition of Dr. Stephanie</p> <p>8 Benight. The time is 3:42. We're on the record.</p> <p>9 BY MR. THORNBURGH:</p> <p>10 Q. Hi, Dr. Benight.</p> <p>11 A. Hello.</p> <p>12 Q. I hope you had a good lunch.</p> <p>13 A. Yes.</p> <p>14 Q. Good. Before we went off the record, we</p> <p>15 were talking about the sample that was sent from</p> <p>16 Exponent -- strike that.</p> <p>17 Before we went off the record, we were</p> <p>18 talking about the QUV sample, treated sample of the</p> <p>19 TVT device that was sent to Histon.</p> <p>20 Do you recall that?</p> <p>21 A. Yes.</p> <p>22 Q. And you testified that you had divided or</p> <p>23 cut six pieces of the pristine mesh off of the</p> <p>24 exemplar to conduct the QUV testing; is that</p> <p>25 correct?</p>
Page 131	Page 133
<p>1 A. Well, I would like to take a break now. I</p> <p>2 requested a break. You said at the beginning if I</p> <p>3 wanted a break, then I could take a break.</p> <p>4 Q. Well, but I -- but I had -- I had a</p> <p>5 caveat, and that is if there is a question that is</p> <p>6 outstanding --</p> <p>7 A. You haven't asked a question.</p> <p>8 THE WITNESS: Madam Court Reporter, can</p> <p>9 you please read back the record where the question</p> <p>10 is.</p> <p>11 MR. HUTCHINSON: Dan, I think she may have</p> <p>12 asked your -- answered your question, but --</p> <p>13 MR. THORNBURGH: She didn't. I asked her</p> <p>14 to identify -- I asked her to identify what internal</p> <p>15 Exponent document proves to me or establishes that a</p> <p>16 QUV-treated sample was a -- was actually a sample</p> <p>17 that was given to Histon.</p> <p>18 THE WITNESS: The Histon chain of custody</p> <p>19 document was included in the Exponent production</p> <p>20 prior to Dr. MacLean's testimony.</p> <p>21 MR. HUTCHINSON: Okay.</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. But how did Histon --</p> <p>24 MR. HUTCHINSON: Hey, Dan, that's all.</p> <p>25 We're taking a break.</p>	<p>1 A. I believe so, yes.</p> <p>2 Q. Okay. And I -- and I apologize if I asked</p> <p>3 this question before. I don't remember the answer.</p> <p>4 I'm not sure that I -- or I'm not sure that I got an</p> <p>5 answer, so I'm going to try to ask it again.</p> <p>6 Can you point me to any internal Exponent</p> <p>7 document that will confirm for me or verify to me</p> <p>8 that Sample No. 2 was a sample that was actually</p> <p>9 treated using the QUV photooxidation process?</p> <p>10 A. Sir, I have the items that were part of</p> <p>11 this study that were sent to Histon and sent back</p> <p>12 to me yesterday, and included in that is QUV Sample</p> <p>13 No. 2. If you were here, you could see that.</p> <p>14 Q. Okay. Are you referring to the Histon</p> <p>15 document?</p> <p>16 A. No, sir. These are the actual samples. I</p> <p>17 have a slide that is labeled, "QUV Sample No. 2"</p> <p>18 that has been returned to me from the lab,</p> <p>19 establishing traceability of these samples.</p> <p>20 Q. Okay. But when did that -- when did -- so</p> <p>21 you are looking at a slide, right?</p> <p>22 A. I have a blue box full of the slides that</p> <p>23 are left from the study conducted at Histon, and in</p> <p>24 those slides is a slide labeled, "QUV Sample No. 2."</p> <p>25 These were returned to me from the lab yesterday,</p>

Stephanie Benight, Ph.D.

Page 134	Page 136
<p>1 and if you were here, you would see that slide, sir.</p> <p>2 Q. Okay. So who put -- who identified that</p> <p>3 slide as QUV No. 2?</p> <p>4 A. Well, these were the sides that were sent</p> <p>5 back to me, and they had to get to the lab somehow,</p> <p>6 so I sent them to the lab.</p> <p>7 Q. Yeah, but who wrote -- who put -- who</p> <p>8 wrote on that sample, "QUV No. 2"?</p> <p>9 A. The microscope slide sample?</p> <p>10 Q. Yes.</p> <p>11 A. I don't know whose handwriting it is, but</p> <p>12 it's labeled, "QUV Sample No. 2."</p> <p>13 Q. Okay. So -- but that would -- it would</p> <p>14 have been done by somebody at Histon, correct?</p> <p>15 A. No, I believe this is a slide that was</p> <p>16 originally sent to Histon from Exponent.</p> <p>17 Q. Okay. Well, let me -- let me ask you this</p> <p>18 question.</p> <p>19 Did you do any scanning electron</p> <p>20 microscopy of Sample No. 2?</p> <p>21 A. I would have to look in the production,</p> <p>22 sir. We did scanning electron microscopy on samples</p> <p>23 that were treated in the same QUV chamber at the</p> <p>24 same time as Sample No. 2.</p> <p>25 Q. That wasn't -- obviously that wasn't my</p>	<p>1 A. I am looking at the -- on the electronic</p> <p>2 production, Exhibit No. 6, produced prior to</p> <p>3 Dr. MacLean's testimony.</p> <p>4 And in that microscopy report folder, in</p> <p>5 the SEM folder, and the 2015-08-07_QUIV folder, there</p> <p>6 are SEM images of Samples 4, Samples 5, and Sample</p> <p>7 6, which were treated in the same QUIV chamber, in</p> <p>8 the same batch as Sample No. 2, sent to Histon.</p> <p>9 Q. Okay. How do I know that Sample No. 2 was</p> <p>10 treated in the same batch as Samples No. 4, 5, and</p> <p>11 6?</p> <p>12 MR. HUTCHINSON: Object to form.</p> <p>13 THE WITNESS: I have the remnants from</p> <p>14 Sample No. 2 that were sent back to me from the lab</p> <p>15 and documented in the chain of custody form that I</p> <p>16 received yesterday from the lab, establishing</p> <p>17 traceability.</p> <p>18 And, you know, the samples had to get</p> <p>19 there somehow, so they -- since they were returned</p> <p>20 to me.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. Okay. So let me go back to the question</p> <p>23 before that, that I don't think you have answered.</p> <p>24 I believe your testimony is that you have</p> <p>25 scanning electron microscopy of Samples No. 4, 5,</p>
Page 135	Page 137
<p>1 question.</p> <p>2 My question was, did you perform scanning</p> <p>3 electron microscopy on Sample No. 2?</p> <p>4 MR. HUTCHINSON: Object to form. Also,</p> <p>5 asked and answered. Counsel, she just told you</p> <p>6 that --</p> <p>7 MR. THORNBURGH: Well --</p> <p>8 MR. HUTCHINSON: -- she would have to look</p> <p>9 at the production.</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. And which production are you referring to?</p> <p>12 Earlier today we marked three flash drives as</p> <p>13 different exhibits. And so we marked -- Flash Drive</p> <p>14 No. 6 was documents that were produced by</p> <p>15 Dr. MacLean.</p> <p>16 Flash Drive No. 7 were documents -- was</p> <p>17 the FTIR and the -- and the photoelectron</p> <p>18 spectroscopy documents that were produced by Chad.</p> <p>19 And then -- and then Exhibit No. 8 was the</p> <p>20 flash drive that you produced that had microscopy</p> <p>21 and scanning -- additional microscopy and scanning</p> <p>22 electron microscopy images that were not previously</p> <p>23 produced.</p> <p>24 Which production would you have to look at</p> <p>25 to answer that question?</p>	<p>1 and 6, right?</p> <p>2 A. Yes, that's correct.</p> <p>3 Q. Okay. But you do not have scanning</p> <p>4 electron microscopy images of Samples No. 2,</p> <p>5 correct?</p> <p>6 A. We acquired scanning electron microscopy</p> <p>7 images on Samples 4, 5, and 6, which were processed</p> <p>8 in the same QUIV chamber as Sample No. 2.</p> <p>9 Q. Okay. So the answer is no, you don't have</p> <p>10 scanning electron microscopy images of Sample No.</p> <p>11 4 -- I'm sorry, Sample No. 2, correct?</p> <p>12 A. We have scanning electron microscopy</p> <p>13 images of Samples No. 4, 5, and 6, which were</p> <p>14 treated in the same batch as Sample No. 2 that you</p> <p>15 are referring to.</p> <p>16 Q. I understand that. I'm -- look, I'm not</p> <p>17 trying to be difficult here. I just want a yes or</p> <p>18 no to this question.</p> <p>19 You do not have scanning electron</p> <p>20 microscopy images of Sample No. 2, correct?</p> <p>21 A. Sir, we have scanning electron microscopy</p> <p>22 images of Samples 4, 5, and 6, which were shown to</p> <p>23 have cracking similar to each other and are in the</p> <p>24 same batch as that process of Sample No. 2.</p> <p>25 Q. Okay. So the answer is no, you do not</p>

Stephanie Benight, Ph.D.

<p style="text-align: right;">Page 138</p> <p>1 have scanning electron microscopy of Sample No. 2?</p> <p>2 MR. HUTCHINSON: Objection. Asked and</p> <p>3 answered.</p> <p>4 THE WITNESS: We have SEM images of</p> <p>5 Samples 4, 5, and 6, sir.</p> <p>6 BY MR. THORNBURGH:</p> <p>7 Q. Okay. We looked at some FTIR spectra</p> <p>8 earlier. We looked and saw that you had FTIR of</p> <p>9 Sample No. 4 and Sample No. 6.</p> <p>10 Do you recall that?</p> <p>11 A. I'm looking in the exhibits that I have.</p> <p>12 Q. It was Exhibit 16 -- or 15, Exhibit 15.</p> <p>13 A. Exhibit 15, is that what you are referring</p> <p>14 to?</p> <p>15 Q. Yes.</p> <p>16 A. Yes, I have that in front of me.</p> <p>17 Q. Okay. Did you do FTIR of Sample No. 2?</p> <p>18 A. We did FTIR on -- from what you are</p> <p>19 saying, the exhibits that you have pointed out, on</p> <p>20 Sample No. 4. And then there is not a label on the</p> <p>21 first two pages, but you had indicated, I think,</p> <p>22 earlier that that was Sample No. 6.</p> <p>23 Q. Okay. So you do not have -- strike that.</p> <p>24 Am I correct that you do not have FTIR</p> <p>25 spectra for Sample No. 2?</p>	<p style="text-align: right;">Page 140</p> <p>1 spectra in Exhibit 15.</p> <p>2 And there is also another FTIR document in</p> <p>3 the production given to you prior to Dr. MacLean's</p> <p>4 testimony, but I can't open it on the flash drive.</p> <p>5 Q. Yeah, and I'll -- I'm going to represent</p> <p>6 to you I have looked at those documents, all of</p> <p>7 them, very carefully, and the FTIR documentation</p> <p>8 that was provided prior to Dr. MacLean's deposition</p> <p>9 was that of the chemical-treated samples, not of the</p> <p>10 UV-treated samples, okay.</p> <p>11 So my question is -- my question is very</p> <p>12 simple, I think.</p> <p>13 Do you know sitting here today whether or</p> <p>14 not FTIR microscopy was performed on Sample No. 2?</p> <p>15 MR. HUTCHINSON: Object to form.</p> <p>16 THE WITNESS: We performed FTIR on samples</p> <p>17 that were treated in the same batch as Number 2, and</p> <p>18 that's been provided to you.</p> <p>19 MR. THORNBURGH: Chad, can you please have</p> <p>20 her answer the question? It's a yes or no. It's</p> <p>21 not a trick question.</p> <p>22 Q. Did you or did you not perform FTIR on</p> <p>23 Sample No. 2?</p> <p>24 MR. HUTCHINSON: Counsel --</p> <p>25 MR. THORNBURGH: That's all I want her to</p>
<p style="text-align: right;">Page 139</p> <p>1 A. Similar to the SEM images, we acquired</p> <p>2 FTIR on a representative sample from the batch that</p> <p>3 was processed in the same conditions, in the same</p> <p>4 QUV chamber at the same time.</p> <p>5 Q. So you do not have SEM images -- strike</p> <p>6 that. Withdrawn.</p> <p>7 You do not have -- strike that.</p> <p>8 You did not perform FTIR analysis</p> <p>9 specifically on Sample No. 2, correct?</p> <p>10 MR. HUTCHINSON: Objection. Asked and</p> <p>11 answered.</p> <p>12 THE WITNESS: We performed FTIR analysis</p> <p>13 on, in Exhibit 15, Samples 6 and Samples 4, which</p> <p>14 were processed in the same QUV chamber as Sample No.</p> <p>15 2, sent to Histion.</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. Are there -- do you have any other FTIR</p> <p>18 analysis, other than the analysis performed on</p> <p>19 Sample No. 4 and 6 contained in Exhibit No. 15?</p> <p>20 A. I believe that we also have additional</p> <p>21 FTIR. And, again, you know, I can't open these</p> <p>22 files on the production.</p> <p>23 But we had discussed FTIR acquired on</p> <p>24 October 5th that also includes a saved background</p> <p>25 spectrum and shows similar spectra to the FTIR</p>	<p style="text-align: right;">Page 141</p> <p>1 answer, Chad, yes or no.</p> <p>2 MR. HUTCHINSON: I understand. And,</p> <p>3 Counsel, she has -- she had answered your question.</p> <p>4 MR. THORNBURGH: She's not.</p> <p>5 MR. HUTCHINSON: If you have a document --</p> <p>6 do you have a document maybe that you could show her</p> <p>7 to help her maybe understand where you are going?</p> <p>8 MR. THORNBURGH: Chad --</p> <p>9 MR. HUTCHINSON: She's answered your</p> <p>10 question.</p> <p>11 MR. THORNBURGH: It's a very simple</p> <p>12 question.</p> <p>13 Q. Yes or no, did you perform FTIR on Sample</p> <p>14 No. 2?</p> <p>15 A. I am not able to open the other FTIR</p> <p>16 documents on the flash drive, sir. If you have</p> <p>17 spectra you would like me to look at, I can.</p> <p>18 I have already answered that we performed</p> <p>19 FTIR on the samples that were treated in the same</p> <p>20 QUV chamber that are given in the spectra provided</p> <p>21 to you.</p> <p>22 Q. If you would have performed FTIR analysis</p> <p>23 on Sample No. 2, would they have been produced as</p> <p>24 part of either Exhibit No. 6, 7, or 8?</p> <p>25 A. I believe so, yes.</p>

36 (Pages 138 to 141)

Stephanie Benight, Ph.D.

Page 142	Page 144
<p>1 Q. Okay. And if there -- if there is no FTIR 2 analysis within that production of Sample No. 2, is 3 it safe for me to assume that there was no FTIR 4 analysis performed on Sample No. 2?</p> <p>5 A. All of the FTIR that we performed was 6 provided in the production to you.</p> <p>7 Q. Okay. So we have talked about how the 8 pristine TVT exemplar was cut and there were pieces 9 that were -- that had become samples for certain 10 testing.</p> <p>11 And you identified that there were at 12 least six pieces that were cut from the pristine TVT 13 exemplar, right, that were used, according to you, 14 for UV treatment?</p> <p>15 A. Yes, I believe that's correct.</p> <p>16 Q. Okay. Were there any other pieces that 17 were cut from the pristine TVT exemplar that you 18 received?</p> <p>19 A. There were additional pieces cut for the 20 control pristine, out-of-the-box Prolene sample that 21 was used as part of the microscopy report and sent 22 to Histon.</p> <p>23 And there were also pieces cut that were 24 exposed to plaintiffs' expert, Dr. Guelcher's 25 chemical oxidation protocol.</p>	<p>1 one?</p> <p>2 A. It's in the box where, if you were here, 3 you could see there was another QUV sample, but I 4 don't believe that it was under -- that it underwent 5 the protocol outlined in the project plan.</p> <p>6 Q. Okay. So there is another QUV sample. 7 Which sample number is that?</p> <p>8 A. It says Number 6 on it.</p> <p>9 Q. Okay. So Number 6 did not undergo the 10 project plan outlined in the Histon report, which I 11 think was Exhibit No. 17; is that correct?</p> <p>12 A. The sample that I have returned to me from 13 the samples I received yesterday as part of the 14 study from the lab, Sample No. 2 looks to have been 15 processed by the lab, and a sample labeled Number 6, 16 it appears to be intact.</p> <p>17 Q. Okay. Intact and not processed by 18 Histon?</p> <p>19 A. It's not in a resin or paraffin block.</p> <p>20 Q. What, if anything, was performed -- what, 21 if any, testing was performed on Exhibit No. 6 by 22 Histon?</p> <p>23 A. Exhibit No. 6?</p> <p>24 Q. I'm sorry. Sample No. 6.</p> <p>25 A. According to the project plan and the</p>
Page 143	Page 145
<p>1 Q. Okay. So we're going to talk about that 2 process in a moment.</p> <p>3 So what I understand, though, is of the 4 six UV-treated samples that you had, you only 5 submitted one of those samples for histology, right?</p> <p>6 A. We actually I have the box in front of me 7 that was returned, and we sent two QUV process 8 samples to Histon, one of which went through the 9 processing, embedding, and staining protocol 10 outlined in Dr. MacLean's microscopy report.</p> <p>11 Q. So one was -- I think what you are saying 12 is -- and I think that when we looked at the -- the 13 Histon project plan, it indicated that they 14 received one QUV specimen that was divided in half, 15 half of it was treated with resin and half of it -- 16 the -- half of the other -- the other half was 17 treated with paraffin, right?</p> <p>18 A. That's what the project plan says, yes.</p> <p>19 Q. Okay. And so is that your understanding, 20 that there wasn't additional QUV other than what the 21 project plan shows; is that correct?</p> <p>22 A. Well, there were two samples that were 23 returned to me, one of which looks to have been 24 processed in paraffin and resin.</p> <p>25 Q. What about the other half or the other</p>	<p>1 samples that I have received that you would be able 2 to see if you were here, they are not in a resin or 3 a paraffin block. It's just in -- on a slide 4 wrapped in some aluminum foil.</p> <p>5 Q. Okay. And was that a deviation from the 6 protocol that was set out or the plan that was 7 developed?</p> <p>8 A. No, not at all. The plan was to process a 9 QUV process sample, and that's what we did.</p> <p>10 Q. Why did you send Sample No. 6 to Histon 11 if they weren't going to perform any analysis on -- 12 on that sample?</p> <p>13 A. Probably as a backup for them at their 14 convenience.</p> <p>15 Q. Do you know why?</p> <p>16 MR. HUTCHINSON: Objection. Asked and 17 answered.</p> <p>18 THE WITNESS: Probably as a backup for 19 their convenience.</p> <p>20 BY MR. THORNBURGH:</p> <p>21 Q. But in any event, only one of those 22 samples was actually processed by Histon for the 23 microphotography that was done later on, correct?</p> <p>24 A. Well, we processed a QUV oxidized sample, 25 a pristine Prolene mesh sample, and a chemically</p>

Stephanie Benight, Ph.D.

Page 146	Page 148
<p>1 oxidized sample according to plaintiffs' expert, 2 Dr. Scott Guelcher's IUGA proceedings paper 3 protocol. 4 Q. So let me ask you -- 5 A. We also processed a control tissue sample 6 that was rabbit skin as part of the study. 7 Q. Okay. So let me ask you this question. 8 Of the six or alleged six QUV-treated 9 samples, why did you only ask Histon to process one 10 sample of the six? 11 A. From the SEM and the FTIR, the samples 12 were shown to have similar morphology and similar 13 FTIR spectra. And in processing one sample, Histon 14 can create hundreds and hundreds of sections from 15 microtoming. 16 Q. But you could have sent -- you could have 17 asked Histon to perform histopathology on all six 18 specimens, but only -- or samples, but only one 19 sample was actually processed, right? 20 MR. HUTCHINSON: Object to form. Compound 21 question. 22 THE WITNESS: We found that, from the FTIR 23 and the SEM, the samples that were imaged and 24 measured were similar. 25 And so one sample from that batch that was</p>	<p>1 micrographs that were taken of processed sections, 2 embedded and staining protocol slides from Histon. 3 The files that are on Exhibit No. 8 4 include SEM images of chemically oxidized processed 5 mesh and optical microscopy images as well as SEM 6 images of QUV processed mesh. 7 Q. Okay. I think I understand. 8 A. Great. 9 Q. Okay. So regarding the chemical -- or 10 chemical -- yeah, chemical treated samples, let's 11 just turn our attention just briefly -- I think 12 hopefully briefly to that experiment. 13 So how many pieces were cut from the TVT 14 exemplar for purpose of -- or purposes of the 15 chemical treatment oxidation experiment that you 16 performed? 17 A. A few. 18 Q. And does that mean two? 19 A. Well, I said, "A few." 20 Q. Well, how many precisely? 21 A. On the -- on the same order as the number 22 that were processed for the QUV process step. 23 Q. So is that an additional six? 24 A. It's on the order of that number. 25 Q. What internal Exponent document would I</p>
Page 147	Page 149
<p>1 processed in the same QUV chamber was sent to 2 Histon, where they had the capability to create 3 hundreds and hundreds of sections from one embedded 4 sample. 5 MR. HUTCHINSON: Hey, Dan, could you back 6 up from the microphone for a little bit, please? We 7 are getting a lot of static. 8 BY MR. THORNBURGH: 9 Q. Now, we -- I think earlier today we marked 10 as Exhibit No. 1 the microscopy image index. 11 Do you recall that? 12 A. Yes, I have that in front of me. 13 Q. And this index was -- was, I think, 14 identical -- well, I compared this index with the 15 microphotographs that were produced by Dr. MacLean, 16 and it would appear that this would be an index of 17 those photomicrographs or microphotographs; is 18 that -- is that a correct understanding? 19 A. That's correct, sir. 20 Q. And the additional microphotographs that 21 were produced by you today on Exhibit No. 8 would 22 not be identified on this grid, correct? 23 A. The microscopy -- 24 Q. Or the -- on Exhibit No. 1, sorry. 25 A. The microscopy image index includes the</p>	<p>1 look at to confirm how many samples from the 2 exemplar were used for the chemical oxidation 3 experiment? 4 A. We processed the chemically oxidizing 5 protocol samples and imaged them with SEM. 6 Q. Were all -- were all samples imaged using 7 SEM? 8 A. It's likely that, similar to the QUV, we 9 imaged a representative sample from the batch that 10 was processed with the chemical oxidation protocol 11 according to Scott Guelcher. 12 Q. Okay. So when you cut the pieces from the 13 exemplar, did you identify which pieces would be 14 treated chemically to try to oxidize them with some 15 sort of identification number? 16 A. A few -- set of samples were cut and all 17 processed from the same oxidation solution. 18 (Whereupon, a brief discussion off the 19 record.) 20 BY MR. THORNBURGH: 21 Q. You had testified earlier that for the 22 UV-treated samples you had labeled those samples as 23 Sample 1 through 6. 24 Do you recall that testimony? 25 A. Yes.</p>

38 (Pages 146 to 149)

Stephanie Benight, Ph.D.

Page 150	Page 152
<p>1 Q. Okay. So what samples were labeled --</p> <p>2 strike that.</p> <p>3 How did you -- how did you label each</p> <p>4 chemically treated sample under your experiment --</p> <p>5 or -- for the chemical treatment?</p> <p>6 So in other words -- let me just ask a</p> <p>7 better question.</p> <p>8 So for the UV treatment, we -- you are</p> <p>9 testifying that Samples 1 through 6 underwent UV --</p> <p>10 the UV process.</p> <p>11 What sample numbers were submitted for</p> <p>12 chemical analysis or chemical treatment?</p> <p>13 A. We processed a similar number of samples</p> <p>14 for -- under the chemical oxidizing protocol.</p> <p>15 Q. Okay. So did you label the seventh sample</p> <p>16 as a sample that was treated chemically?</p> <p>17 A. The samples that were sent to the</p> <p>18 laboratory were labeled with the number four.</p> <p>19 Q. Well, so -- okay. So was Sample No. 4</p> <p>20 treated with chemical oxidation or chemicals to try</p> <p>21 to intentionally oxidize it?</p> <p>22 A. The Sample No. 4 in the Histon documents</p> <p>23 was treated with the chemical oxidation protocol, as</p> <p>24 outlined by Dr. Scott Guelcher.</p> <p>25 Q. Okay. But I thought you testified earlier</p>	<p>1 order of the same -- a similar number of samples</p> <p>2 using the chemically oxidized protocol compared to</p> <p>3 the QUV oxidized protocol.</p> <p>4 Q. Okay. That's fair. So for each</p> <p>5 experiment, the samples were labeled the same?</p> <p>6 A. For each experiment, the QUV samples were</p> <p>7 labeled 1 through 6, and a similar set of samples on</p> <p>8 the order of the number of samples processed for QUV</p> <p>9 were processed using Dr. Scott Guelcher's protocol.</p> <p>10 One of those samples that was</p> <p>11 representative of the batch, oxidized from the same</p> <p>12 chemical oxidizing solution, was sent to Histon,</p> <p>13 where it was given the label number four.</p> <p>14 Q. Okay. So --</p> <p>15 A. In the Histon study, Labels No. 1 pertain</p> <p>16 to an exemplar, out-of-the-box, pristine Prolene</p> <p>17 mesh, and Number 2 pertains to the QUV oxidized</p> <p>18 mesh.</p> <p>19 Number 4 pertains to a mesh sample that</p> <p>20 was exposed to the chemically oxidized protocol, as</p> <p>21 outlined by Dr. Scott Guelcher. And Sample No. 5 is</p> <p>22 the control tissue.</p> <p>23 This is all in the QC record provided by</p> <p>24 the lab and outlined very clearly. Specifically, I</p> <p>25 am looking at Exhibit No. 5 and also the staining</p>
Page 151	Page 153
<p>1 that Samples 1 through 6 were treated with QUV.</p> <p>2 A. There were Samples No. 1 through 6 that</p> <p>3 were treated with QUV. I'm talking about the sample</p> <p>4 that was sent to Histon and labeled as Sample No.</p> <p>5 4.</p> <p>6 Q. Well, how do I know that you didn't</p> <p>7 mistakenly send a different sample to Histon to --</p> <p>8 to be analyzed as a chemical-treated specimen?</p> <p>9 MR. HUTCHINSON: Object to form.</p> <p>10 THE WITNESS: There is a record of the</p> <p>11 samples sent and then also received and returned to</p> <p>12 me yesterday. And if you were here, you could see</p> <p>13 them in person.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. Okay. But I'm just trying to understand,</p> <p>16 because you testified that Samples 1 through 6 were</p> <p>17 treated with QUV and Samples 7 and above were</p> <p>18 treated with chemicals to try to intentionally</p> <p>19 oxidize them.</p> <p>20 So why does the Histon report identify</p> <p>21 Exhibit No. 4 as -- Sample No. 4 as a sample that</p> <p>22 was treated chemically?</p> <p>23 A. I believe you said that it was Samples</p> <p>24 No. 7 and above that were chemically oxidized.</p> <p>25 I said that we chemically oxidized on the</p>	<p>1 log document, which I'm not sure that -- oh, yes,</p> <p>2 Exhibit No. 17.</p> <p>3 Q. Okay. So Exhibit Number -- oh, hold on</p> <p>4 one second.</p> <p>5 Okay. So let's look at the Histon</p> <p>6 staining log.</p> <p>7 Do you have that in front of you?</p> <p>8 A. Oh, also, before I finish my answer -- for</p> <p>9 the previous question, the lab does sort of blindly</p> <p>10 receive the samples so that no bias is put on them</p> <p>11 when they are processed, embedded, and stained.</p> <p>12 They label them with the numbers and then</p> <p>13 keep a record of the labels, from our labels that we</p> <p>14 sent to their labels on the slides, to ensure</p> <p>15 traceability.</p> <p>16 Q. Okay. So your testimony is that when</p> <p>17 Histon receives -- the Histon lab, which is the</p> <p>18 third-party laboratory who did the histopathology,</p> <p>19 right?</p> <p>20 A. They processed the samples we sent,</p> <p>21 embedded them, and then stained them according to</p> <p>22 Dr. Iakovlev's protocol.</p> <p>23 Q. Okay. But then you said that the lab</p> <p>24 blindly receives the samples.</p> <p>25 Which lab are you talking about?</p>

39 (Pages 150 to 153)

Stephanie Benight, Ph.D.

Page 154	Page 156
<p>1 A. Histon, sir.</p> <p>2 Q. Okay. So Histon blindly receives the</p> <p>3 samples.</p> <p>4 How do you --</p> <p>5 A. That's -- oh, go ahead, sorry.</p> <p>6 Q. No, that -- I just want to make sure I</p> <p>7 understand your testimony.</p> <p>8 Your testimony was that Histon blindly</p> <p>9 receives the samples, right?</p> <p>10 A. No, that's in correct. Histon receives</p> <p>11 the sample that we sent and then they assign them</p> <p>12 numbers so that they do not assign any bias while</p> <p>13 processing the samples.</p> <p>14 But in their log, the samples are recorded</p> <p>15 to the label that was on them when we sent them to</p> <p>16 Histon.</p> <p>17 Q. Okay. So for the chemical-oxidized</p> <p>18 experiment, you sent to Histon one sample, correct?</p> <p>19 A. Well, we actually sent two, but they</p> <p>20 processed one.</p> <p>21 Q. Do you know why they only processed one</p> <p>22 sample rather than two?</p> <p>23 A. As part of the project plan, they</p> <p>24 processed one of the chemically oxidized samples.</p> <p>25 I need to take a break.</p>	<p>1 A. It appears to be, yes.</p> <p>2 Q. Okay. And do you know what sample was --</p> <p>3 from the chemically treated samples was analyzed</p> <p>4 using scanning electron microscopy?</p> <p>5 A. We analyzed a few different samples from</p> <p>6 those that were exposed with the same solution made</p> <p>7 from Dr. Scott Guelcher's protocol.</p> <p>8 Q. Okay. My question is, do you know which</p> <p>9 samples were analyzed?</p> <p>10 A. Sir, these images don't have a file name</p> <p>11 associated with them in front of me.</p> <p>12 Q. Well, the file names that they came in --</p> <p>13 came with say "Flip" -- it says, "8/25/15 Oxidized</p> <p>14 Mesh Flip-01" through "Flip-05," and then the</p> <p>15 same -- and then images Oxidized Mesh 01 through 03.</p> <p>16 Do you know what that naming -- what those</p> <p>17 names mean? Because that's how they were produced</p> <p>18 to us.</p> <p>19 A. These are images of several different</p> <p>20 areas of the same sample, oxidized mesh, and then</p> <p>21 the numbered samples after that are different areas</p> <p>22 of the sample. And then "flip" indicates the</p> <p>23 opposite side of the sample was imaged.</p> <p>24 Q. Okay. So just -- just one sample was</p> <p>25 evaluated with scanning electron microscopy of the</p>
Page 155	Page 157
<p>1 MR. THORNBURGH: Okay. That's fine.</p> <p>2 THE VIDEOGRAPHER: Your microphone.</p> <p>3 Going off the record at 4:18.</p> <p>4 (Whereupon, a brief recess was taken.)</p> <p>5 MR. HUTCHINSON: Yes, Dan, we're all here.</p> <p>6 THE VIDEOGRAPHER: Back on the record at</p> <p>7 4:22.</p> <p>8 MR. THORNBURGH: Are we on the record?</p> <p>9 MR. HUTCHINSON: Yes.</p> <p>10 MR. THORNBURGH: Oh, I'm sorry. I didn't</p> <p>11 hear that.</p> <p>12 Okay. So I -- I provided the court</p> <p>13 reporter with some documents that are numbered 11A</p> <p>14 through I.</p> <p>15 THE REPORTER: Yes, sir.</p> <p>16 MR. THORNBURGH: Okay. If we can just go</p> <p>17 ahead and mark all those as the next exhibit.</p> <p>18 (Whereupon, a brief discussion off the</p> <p>19 record.)</p> <p>20 (Whereupon, Exhibit 19 was marked for</p> <p>21 identification.)</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. Okay. Dr. Benight, do you recognize</p> <p>24 Exhibit No. 19 as the scanning electron microscopy</p> <p>25 images of the chemically treated batch?</p>	<p>1 chemical-treated samples?</p> <p>2 A. Well, from the exhibit you have handed me,</p> <p>3 and correlating that with the online production</p> <p>4 folder, and I am in 2015-08-25_COCL2 Oxidized Mesh,</p> <p>5 that appears to be a collection of images from one</p> <p>6 sample.</p> <p>7 Q. Okay. Were there any other scanning</p> <p>8 electron microscopy images taken from any other</p> <p>9 chemically treated sample?</p> <p>10 A. I believe there are additional images</p> <p>11 within the microscopy report and SEM folder in</p> <p>12 Exhibit No. 6, which contains the production from</p> <p>13 prior to Dr. MacLean's deposition. I'm looking at</p> <p>14 file folder named 2015-08-26.</p> <p>15 And there is also additional SEM images of</p> <p>16 Cobalt(II) chloride oxidized processed samples.</p> <p>17 Q. Within that folder that you just</p> <p>18 identified?</p> <p>19 A. Yes, sir.</p> <p>20 Q. Okay. And are those of a different sample</p> <p>21 than those that were looked at in Exhibit No. 19?</p> <p>22 A. They are all from the same batch of</p> <p>23 samples, sir.</p> <p>24 Q. I know, but my question is, is that a</p> <p>25 different sample than we see in Exhibit No. 19?</p>

40 (Pages 154 to 157)

Stephanie Benight, Ph.D.

Page 158	Page 160
<p>1 A. They are all processed similarly.</p> <p>2 Q. Is it -- is it a different sample that was</p> <p>3 looked at under scanning electron microscopy than</p> <p>4 the sample that we just looked at in Exhibit No. 19?</p> <p>5 A. It might be.</p> <p>6 Q. Do you know?</p> <p>7 A. The samples were all processed the same,</p> <p>8 sir.</p> <p>9 Q. Okay. So for Exhibit No. --</p> <p>10 A. And this was taken on a different day.</p> <p>11 Q. For Number -- for Exhibit No. 19 --</p> <p>12 A. Uh-huh.</p> <p>13 Q. -- what sample is that? What is the</p> <p>14 sample identification number for -- for the SEM</p> <p>15 images in Exhibit No. 19?</p> <p>16 A. Well, as I stated, they were all -- all</p> <p>17 the images are of the same sample. It's one sample.</p> <p>18 Q. Yeah, but what is the sample number?</p> <p>19 A. Well, on these images there doesn't appear</p> <p>20 to be a sample number.</p> <p>21 Q. Okay. Because we know that you sent a</p> <p>22 sample to Histon that you called Sample No. 4 from</p> <p>23 the chemical-treated samples, right?</p> <p>24 A. Well, that's the designation that is in</p> <p>25 the Histon paperwork.</p>	<p>1 titled 8-26 -- sorry, 2015-8-26 is because the FTIR</p> <p>2 spectra was ran on 8/26/2015; is that correct?</p> <p>3 A. To my knowledge, yes.</p> <p>4 Q. Actually, it looks like it was ran on</p> <p>5 8/25/2015.</p> <p>6 If you turn -- if you turn to page 2 of</p> <p>7 Exhibit 20, it says, "FTIR data 8/25/15"?</p> <p>8 A. It's quite possible that the PowerPoint</p> <p>9 file you are referring to in the production that</p> <p>10 includes the label four and a half weeks was</p> <p>11 prepared from spectra that were acquired a day</p> <p>12 before.</p> <p>13 Q. Okay. So if you turn to page -- or the</p> <p>14 third page in Exhibit No. 20.</p> <p>15 A. Okay.</p> <p>16 Q. Okay. You will see that there is -- it</p> <p>17 says, "Exemplar," at the top, and there is a FTIR</p> <p>18 spectra.</p> <p>19 Do you see that?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. And then underneath those -- the</p> <p>22 exemplar is another spectra that is labeled</p> <p>23 "Oxidized."</p> <p>24 Do you see that?</p> <p>25 A. Yes.</p>
Page 159	Page 161
<p>1 Q. I thought that was a designation that</p> <p>2 correlated with your samples.</p> <p>3 A. We sent a representative sample of the</p> <p>4 chemically oxidized samples to Histon.</p> <p>5 Q. Okay. So what sample -- what Exponent</p> <p>6 chemically treated sample are we looking at in</p> <p>7 Exhibit No. 19, if you know? If you don't know,</p> <p>8 that's fine.</p> <p>9 A. I mean, we're looking at a representative</p> <p>10 sample. The SEM images are a representative sample</p> <p>11 of that batch.</p> <p>12 MR. THORNBURGH: Okay. Let's -- if we</p> <p>13 could mark as Exhibit No. 20 the document that I</p> <p>14 provided to the court reporter as Number 12.</p> <p>15 (Whereupon, a brief discussion off the</p> <p>16 record.)</p> <p>17 (Whereupon, Exhibit 20 was marked for</p> <p>18 identification.)</p> <p>19 THE WITNESS: I have Exhibit 20 in front</p> <p>20 of me.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. Okay. 20 was sent to us, a document</p> <p>23 titled: "2015-08-26 FTIR-4.5 weeks," okay?</p> <p>24 A. Okay.</p> <p>25 Q. And I assume that the reason why it was</p>	<p>1 Q. Okay. And this is what was treated</p> <p>2 chemically in an attempt to oxidize it?</p> <p>3 A. Yes, according to Dr. Scott Guelcher's</p> <p>4 protocol.</p> <p>5 Q. Okay. What sample number was analyzed</p> <p>6 from the chemically treated samples using FTIR?</p> <p>7 A. All of the samples that were chemically</p> <p>8 oxidized according to Dr. Guelcher's protocol were</p> <p>9 oxidized with the same solution separated into</p> <p>10 different vials. This is one of those samples</p> <p>11 representative from that batch, sir.</p> <p>12 Q. Okay. So which sample number is it?</p> <p>13 A. In the spectrum it doesn't have a sample</p> <p>14 number, sir.</p> <p>15 Q. Okay. Which -- what internal Exponent</p> <p>16 document do I look to, to confirm what sample number</p> <p>17 I'm looking at from the batch of chemically treated</p> <p>18 samples?</p> <p>19 A. Well, it's a representative sample from</p> <p>20 that batch.</p> <p>21 Q. So there's -- is it fair to say that there</p> <p>22 is no document that I can look at to determine what</p> <p>23 sample number we are looking at here?</p> <p>24 MR. HUTCHINSON: Object to form. Asked</p> <p>25 and answered.</p>

41 (Pages 158 to 161)

Stephanie Benight, Ph.D.

Page 162	Page 164
<p>1 BY MR. THORNBURGH:</p> <p>2 Q. Right?</p> <p>3 A. The spectrum in front of me that you had</p> <p>4 indicated is from -- a sample from -- that's</p> <p>5 processed in the same batch of chemically oxidized</p> <p>6 samples, sir.</p> <p>7 Q. So I take it to understand -- I think I</p> <p>8 understand your testimony, no, there isn't an</p> <p>9 internal Exponent document that I can look to, to</p> <p>10 understand which sample I'm looking at here?</p> <p>11 A. This is a sample that has been chemically</p> <p>12 oxidized in that protocol according to Dr. Scott</p> <p>13 Guelcher.</p> <p>14 Q. Is it Sample No. 4 that was sent to</p> <p>15 Histion?</p> <p>16 A. It's a sample from -- representative</p> <p>17 sample from the same batch --</p> <p>18 Q. Do you know if it --</p> <p>19 A. -- that was sent to Histion.</p> <p>20 Q. Sorry. Do you know if it is Sample No. 4?</p> <p>21 A. It's a representative sample, sir.</p> <p>22 Q. If you look at -- on -- still on the third</p> <p>23 page of Exhibit 20, there is a peak -- it looks like</p> <p>24 a different peak from that of the exemplar, which</p> <p>25 runs from, you know, about 3,000 reciprocal</p>	<p>1 Did you do -- at your instruction at your</p> <p>2 lab at Exponent in California?</p> <p>3 A. Yes, this was done in our -- on our FTIR</p> <p>4 instrument in California.</p> <p>5 Q. And are you familiar with FTIR analysis?</p> <p>6 A. I am.</p> <p>7 Q. And did you help in preparing</p> <p>8 Dr. MacLean's report concerning the FTIR analysis?</p> <p>9 A. I'm not aware of any FTIR analysis that</p> <p>10 was included in Dr. MacLean's microscopy report.</p> <p>11 Q. Well, in the experiments -- let me ask</p> <p>12 this question.</p> <p>13 How much communication did you have with</p> <p>14 Dr. MacLean concerning the chemical oxidation</p> <p>15 experiment and the UV oxidation experiment?</p> <p>16 A. We discussed those experiments.</p> <p>17 Q. Okay. Did you discuss the findings in the</p> <p>18 FTIR?</p> <p>19 A. I don't recall. We might have.</p> <p>20 Q. Okay. What might have you discussed with</p> <p>21 Dr. MacLean regarding the FTIR?</p> <p>22 A. Well, in general, I discussed the</p> <p>23 experiments that we performed as part of this study</p> <p>24 that was done to investigate whether intentionally</p> <p>25 oxidized Prolene mesh stains with H&E.</p>
Page 163	Page 165
<p>1 centimeters to 3,600 reciprocal centimeters.</p> <p>2 Do you see that?</p> <p>3 A. Yeah, I see a peak.</p> <p>4 Q. Okay. What is -- what is your</p> <p>5 understanding of that peak?</p> <p>6 MR. HUTCHINSON: Object to form.</p> <p>7 THE WITNESS: I'm not prepared to offer</p> <p>8 any opinions on the spectra today, sir.</p> <p>9 BY MR. THORNBURGH:</p> <p>10 Q. You don't know one way or the other what</p> <p>11 that chemical or molecule is that we're looking at,</p> <p>12 correct?</p> <p>13 MR. HUTCHINSON: Object to form. Counsel,</p> <p>14 that's been asked and answered. She just told you</p> <p>15 she's not prepared to offer any opinions on the</p> <p>16 spectra today.</p> <p>17 BY MR. THORNBURGH:</p> <p>18 Q. Did you run these -- let me just -- let</p> <p>19 me -- let me try to understand.</p> <p>20 Did you run these FTIR, or was that done</p> <p>21 by somebody else?</p> <p>22 A. It's likely that it was done by somebody</p> <p>23 else, possibly a technician in our lab, at my</p> <p>24 instruction.</p> <p>25 Q. Did you do -- I'm sorry.</p>	<p>1 Q. Okay. And did you provide -- strike that.</p> <p>2 Did you talk to Dr. MacLean about the</p> <p>3 peaks -- the broad -- very broad peak that we see</p> <p>4 from 3,000 to 6 -- 3,600 reciprocal centimeters?</p> <p>5 A. These spectra were provided to</p> <p>6 Dr. MacLean.</p> <p>7 Q. Okay. And if you look further down to the</p> <p>8 right of -- of the oxidized spectra on -- still on</p> <p>9 the third page?</p> <p>10 A. Okay.</p> <p>11 Q. Okay. And do you see 1,600 reciprocal</p> <p>12 centimeters, do you see that do you see that area on</p> <p>13 the spectra?</p> <p>14 A. I see that area, sir, yes.</p> <p>15 Q. Okay. And do you see that there is a peak</p> <p>16 just to the left of the 1,600 spectra, at about</p> <p>17 1,650, on the oxidized -- chemically oxidized sample</p> <p>18 that does not appear on the exemplar?</p> <p>19 A. Yes.</p> <p>20 Q. And you do understand, don't you, that a</p> <p>21 peak at 1,750 reciprocal centimeters would indicate</p> <p>22 a -- an -- a carbonyl consistent with oxidation?</p> <p>23 MR. HUTCHINSON: Object to form.</p> <p>24 THE WITNESS: It's my understanding that a</p> <p>25 peak around 1,750, as you have indicated, can be</p>

42 (Pages 162 to 165)

Stephanie Benight, Ph.D.

Page 166	Page 168
<p>1 indicative of oxidation.</p> <p>2 BY MR. THORNBURGH:</p> <p>3 Q. 1,650?</p> <p>4 A. You said 1,750.</p> <p>5 Q. Yeah, no, I said 1,650. But you</p> <p>6 understand that 1,650 --</p> <p>7 MR. HUTCHINSON: Actually, no, Dan, I'm</p> <p>8 sorry. The court reporter wrote down 1,750, so --</p> <p>9 MR. THORNBURGH: Okay. I might have. I</p> <p>10 might have.</p> <p>11 MR. HUTCHINSON: But I'm going to object</p> <p>12 to the extent that it's outside the witness's area</p> <p>13 of testimony.</p> <p>14 MR. THORNBURGH: Right.</p> <p>15 Q. Okay. So -- but you understand that</p> <p>16 carbonyls on oxidized propylene appear anywhere from</p> <p>17 about 1,650 up to 1,800 reciprocal centimeters?</p> <p>18 MR. HUTCHINSON: Same objection.</p> <p>19 THE WITNESS: I understand.</p> <p>20 BY MR. THORNBURGH:</p> <p>21 Q. Did you talk to Dr. MacLean about the</p> <p>22 results or the data that was found on -- or in these</p> <p>23 FTIR spectra of the chemically oxidized mesh?</p> <p>24 A. These spectra were provided for</p> <p>25 Dr. MacLean's review once they were acquired.</p>	<p>1 A. Yes.</p> <p>2 Q. Okay. And the -- why did you -- why --</p> <p>3 what was your reason, again, for running this</p> <p>4 specimen again?</p> <p>5 A. We carried out FTIR on this sample because</p> <p>6 we wanted to save a background spectrum associated</p> <p>7 with it.</p> <p>8 This sample was a QUV-processed sample</p> <p>9 that was processed in the same chamber at the same</p> <p>10 time under the same conditions as the previously</p> <p>11 examined QUV-processed samples by FTIR.</p> <p>12 Q. Okay. So -- so the background information</p> <p>13 gives us what? In layman's terms, why are we</p> <p>14 running background?</p> <p>15 A. Essentially there is, in the air and such,</p> <p>16 peaks that can show up in the FTIR, and the</p> <p>17 background is used as sort of a zero so that when</p> <p>18 you are analyzing your sample, you are only</p> <p>19 collecting peaks pertaining to that sample.</p> <p>20 Q. Right. So you are excluding -- you are</p> <p>21 excluding the background information?</p> <p>22 A. That's inaccurate, sir. You take a zero</p> <p>23 spectrum in the form of a background, and that is</p> <p>24 recorded on the instrument so that when you analyze</p> <p>25 your sample of interest, you are only collecting</p>
Page 167	Page 169
<p>1 Q. Did you talk to him about the data</p> <p>2 contained herein, in Exhibit No. 20?</p> <p>3 A. I mean, I had several discussions with him</p> <p>4 about the experiments that we were conducting.</p> <p>5 Q. Did you talk to him about the peak that</p> <p>6 was observed on the chemically oxidized specimen at</p> <p>7 1,650?</p> <p>8 A. I don't recall if we discussed that</p> <p>9 specific peak. These spectra were made available to</p> <p>10 him after they were completed.</p> <p>11 MR. THORNBURGH: Okay. Okay. A document</p> <p>12 that's titled: "13A."</p> <p>13 (Whereupon, a brief discussion off the</p> <p>14 record.)</p> <p>15 (Whereupon, Exhibit 21 was marked for</p> <p>16 identification.)</p> <p>17 BY MR. THORNBURGH:</p> <p>18 Q. Okay. Exhibit No. 21 is the document that</p> <p>19 was sent to us titled: "2015-10-2005_Summary."</p> <p>20 And I believe you said that this is the</p> <p>21 sample that was tested using FTIR on October 5th,</p> <p>22 2005 -- 2015, correct?</p> <p>23 A. That's correct.</p> <p>24 Q. Okay. And so it looks like the first page</p> <p>25 of Exhibit 21 is the background spectra?</p>	<p>1 peaks indicative of that sample.</p> <p>2 Q. Yeah, that's what -- I think that's what I</p> <p>3 was trying to say. Maybe I still don't understand</p> <p>4 it. As I said, I'm a layperson.</p> <p>5 But you don't -- you want to make sure you</p> <p>6 understand the background information so that you</p> <p>7 are interpreting the FTIR on the specimen</p> <p>8 appropriately, right?</p> <p>9 MR. HUTCHINSON: Object to form. Also</p> <p>10 object to the extent counsel is providing</p> <p>11 commentary.</p> <p>12 BY MR. THORNBURGH:</p> <p>13 Q. You still have to answer the question.</p> <p>14 A. Can you repeat the question?</p> <p>15 Q. Yeah, I'm just trying to -- I'm not --</p> <p>16 it's not -- it's really not a trick question. I'm</p> <p>17 just trying to understand --</p> <p>18 A. Sir, I just don't understand the question.</p> <p>19 Can you please repeat it?</p> <p>20 Q. Sure. Sure.</p> <p>21 So the purpose of running the background,</p> <p>22 if I understand your testimony correctly, is because</p> <p>23 there -- you want to make sure that you have -- are</p> <p>24 looking at the correct information when you run an</p> <p>25 FTIR spectra on the actual specimen, right?</p>

43 (Pages 166 to 169)

Stephanie Benight, Ph.D.

Page 170	Page 172
<p>1 A. Yes, you want to look at the sample itself</p> <p>2 and ensure that you are only collecting peaks that</p> <p>3 are indicative of your sample of interest.</p> <p>4 Q. Right, because the background could have</p> <p>5 oxygen or other things like that, so you don't want</p> <p>6 that to show up on the FTIR spectra of the sample.</p> <p>7 So you are -- you are trying to eliminate</p> <p>8 the background information from the actual spectra</p> <p>9 of the sample being tested?</p> <p>10 MR. HUTCHINSON: Object to form. Compound</p> <p>11 question.</p> <p>12 Counsel, could you rephrase that?</p> <p>13 BY MR. THORNBURGH:</p> <p>14 Q. Yeah. I -- you know what, I'll withdraw</p> <p>15 it because I decided it's not important.</p> <p>16 Let's look at the second page in Exhibit</p> <p>17 No. 21.</p> <p>18 A. Okay.</p> <p>19 Q. Okay. So you ran Specimen No. 6 through</p> <p>20 the FTIR process on October -- on October 5th, 2015,</p> <p>21 correct?</p> <p>22 A. Yes. I believe one of my colleagues</p> <p>23 operated the instrument.</p> <p>24 Q. Okay. Now, you testified a moment ago</p> <p>25 that there were two samples that were sent to</p>	<p>1 that there are two different samples or that there</p> <p>2 is -- they are different, but really, it's quite</p> <p>3 possible that they are indeed the same sample.</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. How -- well, how -- what document do I</p> <p>6 look to, to verify that the sample that was tested</p> <p>7 at Histion is a -- is a -- is the same sample or a</p> <p>8 remnant of the sample that was testified with FTIR</p> <p>9 on October 5th, 2015?</p> <p>10 A. The Sample No. 6 that is in the</p> <p>11 October 5th, 2015, spectrum is from the same batch</p> <p>12 of samples that were processed with QUV, sir.</p> <p>13 Q. Okay. When did you receive Sample No. 6</p> <p>14 that you have in front of you from Histion?</p> <p>15 A. We received the sample labeled -- well,</p> <p>16 it's labeled 15-118-6. We received that yesterday.</p> <p>17 Q. And has that sample been at Histion ever</p> <p>18 since?</p> <p>19 A. Ever since when, sir?</p> <p>20 Q. Since it was initially sent to them</p> <p>21 according to your -- the -- their chain of custody</p> <p>22 document on October 26th, 2015?</p> <p>23 A. Yes.</p> <p>24 Q. I'm sorry. August 26th, 2015?</p> <p>25 A. Yes.</p>
Page 171	Page 173
<p>1 Histion, Sample No. 2 and Sample No. 6, correct?</p> <p>2 A. From the samples that I have received</p> <p>3 back, there are two samples, one labeled Sample No.</p> <p>4 2 and one labeled Sample No. 6.</p> <p>5 Q. Okay. So if I understand the evidence and</p> <p>6 testimony correctly, on October 5th, 2015, an FTIR</p> <p>7 was performed on the sample that you have in front</p> <p>8 of you as Exhibit -- as Sample No. 6, correct?</p> <p>9 A. It --</p> <p>10 MR. HUTCHINSON: Object to form.</p> <p>11 THE WITNESS: It's labeled Number 6.</p> <p>12 BY MR. THORNBURGH:</p> <p>13 Q. So it would appear that that would be the</p> <p>14 same sample that underwent the FTIR analysis on</p> <p>15 October 5th, 2015, correct?</p> <p>16 A. Yes. So it might help if I explain the</p> <p>17 sample to you. This part of the mesh that was sent</p> <p>18 to Histion was secured during -- a glass slide</p> <p>19 during the QUV exposure.</p> <p>20 And so in analyzing Sample No. 6, the</p> <p>21 portion of the mesh that was analyzed was from the</p> <p>22 same sample. Just a remnant was left behind in my</p> <p>23 office, but it's part of the same sample that was</p> <p>24 sent to Histion.</p> <p>25 So I think you are trying to establish</p>	<p>1 Q. Okay. So how can the same sample be in</p> <p>2 the same place -- how can the same sample be in two</p> <p>3 different places at the same time?</p> <p>4 A. There are parts of the same sample, sir.</p> <p>5 Parts of the sample that were remaining in</p> <p>6 my office, Sample No. 6, were acquired with -- or</p> <p>7 measured with FTIR, and the majority of that sample</p> <p>8 was sent to Histion in the date in August that you</p> <p>9 specified.</p> <p>10 Q. Okay. Which internal document at Exponent</p> <p>11 do I look to, to see -- or to determine that Sample</p> <p>12 No. 6 was divided before it was even sent to Histion</p> <p>13 by you and maintained at your office until</p> <p>14 October 5th, when whatever sample or piece of Sample</p> <p>15 No. 6 you retained was tested by FTIR?</p> <p>16 A. Each of these samples was all processed</p> <p>17 the same, with QUV exposure. And in the FTIR that</p> <p>18 we acquired, they showed similar spectra, indicating</p> <p>19 that the samples had been exposed similarly.</p> <p>20 So as I have stated previously, a sample</p> <p>21 that is representative from the batch that was</p> <p>22 processed with QUV was sent to the lab and</p> <p>23 processed, embedded, and stained according to</p> <p>24 Dr. Iakovlev's procedure and protocol.</p> <p>25 Q. What -- what internal document -- so you</p>

Stephanie Benight, Ph.D.

Page 174	Page 176
<p>1 are testifying that Sample No. 6 was processed 2 through the paraffin protocol or the resin protocol; 3 is that correct?</p> <p>4 A. Sir, the Sample No. 6 in the slides that I 5 received was one of the ones that was not processed. 6 I believe the sample that we had referred to as 7 Sample No. 2, QUV oxidized, was processed in both 8 paraffin and resin.</p> <p>9 Q. Okay. But Sample No. 6 was provided to 10 Histon, according to the chain of custody documents 11 from Histon?</p> <p>12 A. What document are you referring to?</p> <p>13 Q. Yeah, let's do that. So --</p> <p>14 A. There is a lot of background noise.</p> <p>15 MR. HUTCHINSON: And, Dan, could you back 16 away from the phone just a minute, please? We're 17 getting a lot of background noise. Thank you. 18 That's better.</p> <p>19 BY MR. THORNBURGH:</p> <p>20 Q. So if you look at Exhibit No. 5?</p> <p>21 A. Okay.</p> <p>22 Q. Okay. So you testified -- you testified 23 earlier that you recently received from Histon 24 remnants of Sample No. 6 that were not processed by 25 Histon; is that correct?</p>	<p>1 went through the six specimens that were treated as 2 a batch with UV radiation as Samples 1, 2, 3, 4, 5, 3 and 6, and when I asked you what samples from that 4 batch was sent to Histon, you testified that there 5 was Sample No. 2.</p> <p>6 And I said, "Well, how do I know it was 7 Sample No. 2? How can you verify that for me?"</p> <p>8 You said, "Let's look at the Histon chain 9 of custody. They labeled it Number 2 because we 10 sent them Sample No. 2 from that batch."</p> <p>11 Are you withdrawing that testimony now?</p> <p>12 MR. HUTCHINSON: Object to form.</p> <p>13 Mischaracterizes the testimony.</p> <p>14 THE WITNESS: Sir, if you were here, you 15 would see that there was a sample labeled Number 2 16 that was sent back to me and originally sent to the 17 lab, and there is also a sample labeled "QUV mesh 18 No. 15-118-6."</p> <p>19 The -- one of these samples was processed, 20 and from looking at the samples, the one where the 21 sample is no longer on the glass slide, it's likely 22 in paraffin and resin, and that sample, along with 23 the other one that was -- unused mesh sample, as 24 indicated in the chain of custody record, received 25 to me -- or that I received yesterday, these samples</p>
Page 175	Page 177
<p>1 A. No, sir. We received an unused mesh 2 sample with the label 15-118-6 as part of the 3 samples received yesterday from Histon. We 4 processed QUV process sample labeled Number 2.</p> <p>5 Q. Okay.</p> <p>6 A. And that's also present on Exhibit No. 5, 7 the second page, or page 1 of 1, since the first 8 page is a chain of custody cover page, where it 9 says, you know, 15-118-2 are part of the H&E stained 10 slides.</p> <p>11 Q. Okay. But I'm just trying to figure out, 12 because you testified earlier that you received a 13 specimen from Histon that was identified by an -- a 14 Histon accession number of 15-118-6, correct?</p> <p>15 A. Yes, that's correct.</p> <p>16 Q. Okay. And you also testified earlier that 17 you know that Sample No. 2 from the UV-treated 18 experiment was sent to Histon because Histon 19 identified the UV-treated sample as 15-118-2.</p> <p>20 Do you recall that?</p> <p>21 A. Well, the sample labeled Number 2 has "2 22 QUV oxidized," a Number 2 label on the glass slide 23 that was sent to Histon, and Histon in its records 24 annotated that as Sample No. 2.</p> <p>25 Q. Yeah, but so you testified earlier when we</p>	<p>1 were sent back.</p> <p>2 BY MR. THORNBURGH:</p> <p>3 Q. Yeah, I understand that.</p> <p>4 And you received Sample No. 2 back and 5 Sample -- or, I'm sorry, Sample No. 2 was processed 6 into a -- into a pathology slide, correct?</p> <p>7 A. Sample No. 15-118-2 was processed, half in 8 paraffin, half in resin, as indicated in the project 9 plan.</p> <p>10 Q. Okay. So based on what you have in front 11 of you and from what you understand as the person 12 who was involved in these experiments, is it your 13 understanding that a -- that Sample No. 6 was also 14 sent to Histon, which wasn't processed, but was 15 returned back to you yesterday?</p> <p>16 A. In the samples that I received, I have a 17 sample labeled 15-118-6, which also is indicated on 18 the chain of custody form received with the samples 19 yesterday as an unused mesh sample.</p> <p>20 Q. Okay. Is that -- is that a -- was that 21 a -- strike that.</p> <p>22 Is that the same Sample No. 6 that -- 23 strike that.</p> <p>24 Is that Exponent number -- withdrawn.</p> <p>25 Let me -- let me try this again.</p>

45 (Pages 174 to 177)

Stephanie Benight, Ph.D.

Page 178	Page 180
<p>1 Did Exponent also send to Histon Sample</p> <p>2 No. 6, and is that the sample that you received</p> <p>3 returned from Histon yesterday?</p> <p>4 MR. HUTCHINSON: Object to form. Compound</p> <p>5 question.</p> <p>6 THE WITNESS: Yesterday I received a</p> <p>7 sample labeled QUV 15-118-6 that appeared to not be</p> <p>8 processed and is consistent with the chain of</p> <p>9 custody cover page and form document.</p> <p>10 And I also received a QUV oxidized sample</p> <p>11 labeled H15-118-2 which was indicated to be</p> <p>12 processed in the protocol followed by Histon,</p> <p>13 including processing, embedding, and staining with</p> <p>14 H&E and followed to be consistent with</p> <p>15 Dr. Iakovlev's protocol.</p> <p>16 BY MR. THORNBURGH:</p> <p>17 Q. I'm going to try to make this simple,</p> <p>18 Doctor.</p> <p>19 Did you send Exponent -- a QUV sample</p> <p>20 labeled by Exponent as Sample No. 2?</p> <p>21 MR. HUTCHINSON: Object to form.</p> <p>22 Counsel, can you rephrase your question?</p> <p>23 BY MR. THORNBURGH:</p> <p>24 Q. Dr. Benight -- Dr. Benight, did you or</p> <p>25 someone at Exponent send to Histon a QUV-treated</p>	<p>1 Histon had possession and custody of Sample No. 6,</p> <p>2 yet on October 5th, Exponent performed FTIR analysis</p> <p>3 on the same Sample No. 6?</p> <p>4 MR. HUTCHINSON: Object to form.</p> <p>5 Argumentative.</p> <p>6 THE WITNESS: Sir, it's likely that since</p> <p>7 the majority of the sample was sent, what you are</p> <p>8 referring to as Sample 15-118-6 was sent to Histon.</p> <p>9 The way these samples were processed in</p> <p>10 the QUV chamber, and if you were here, you could see</p> <p>11 that, is that a mesh sample is taped to a glass</p> <p>12 slide.</p> <p>13 In order to not disturb the sample, the</p> <p>14 sample was cut away from that tape, and so it's</p> <p>15 likely that you are still looking at Sample No. 6 in</p> <p>16 Exhibit No. 21.</p> <p>17 And the majority of that same Sample No. 6</p> <p>18 was sent to the lab for analysis, except they did</p> <p>19 not process that sample. They processed Sample No.</p> <p>20 2.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. Okay. So let me try to understand your</p> <p>23 testimony. Well, let me -- let me ask you this</p> <p>24 question.</p> <p>25 What internal document at Exponent do I</p>
Page 179	Page 181
<p>1 sample that was identified internally by Exponent as</p> <p>2 Sample No. 2?</p> <p>3 A. Yes.</p> <p>4 Q. Okay. Did you or Exponent also send to</p> <p>5 Histon a QUV sample that would have been identified</p> <p>6 internally as Exhibit -- as Sample No. 6?</p> <p>7 A. The label on the sample is 15-118-6.</p> <p>8 Q. Is that -- does that mean that -- that</p> <p>9 Exponent sent to Histon Sample No. 6 from the</p> <p>10 QUV-treated samples?</p> <p>11 A. Sir, all of the samples were processed in</p> <p>12 the same batch. The label on the sample that was</p> <p>13 not processed in the staining protocol has label</p> <p>14 15-118-6.</p> <p>15 Q. Does that mean that Exponent provided</p> <p>16 Sample No. 6 to Histon?</p> <p>17 A. Exponent provided two samples, as I have</p> <p>18 stated. One is labeled --</p> <p>19 Q. Numbered --</p> <p>20 A. -- 2, and one is labeled Number 6.</p> <p>21 Q. Okay. So now --</p> <p>22 A. 15-118-6.</p> <p>23 Q. Okay. So now I'm trying to understand how</p> <p>24 one sample can be at two places at the same time.</p> <p>25 So how is it that up until yesterday,</p>	<p>1 look to, to verify what you are telling me actually</p> <p>2 occurred?</p> <p>3 MR. HUTCHINSON: Object to form. Counsel,</p> <p>4 the witness has already told you that if you were</p> <p>5 here, you could see the document that she's talking</p> <p>6 about and the -- and the -- and the slides.</p> <p>7 BY MR. THORNBURGH:</p> <p>8 Q. What internal Exponent document --</p> <p>9 Exponent document, internal Exponent document do I</p> <p>10 look to, to verify that what you are telling me is</p> <p>11 true?</p> <p>12 A. Well, several documents state that a QUV</p> <p>13 process sample and a chemically oxidized process</p> <p>14 sample were sent to -- to Histon for processing,</p> <p>15 embedding, and staining.</p> <p>16 That's in Dr. MacLean's microscopy report.</p> <p>17 It's in the QC records from the laboratory. It's in</p> <p>18 the Histon project plan. All of these documents</p> <p>19 were produced to you and provided and give that</p> <p>20 information.</p> <p>21 Q. But how do I verify from the internal --</p> <p>22 and this -- that's the whole point of lab notebooks,</p> <p>23 right, you want to be able to verify the process,</p> <p>24 the steps that were taken, okay.</p> <p>25 And so I'm asking you, what internal</p>

46 (Pages 178 to 181)

Stephanie Benight, Ph.D.

Page 182	Page 184
<p>1 document do I look to, what electronic lab notebook</p> <p>2 do I go to at Exponent that tells me that Sample 6</p> <p>3 was sent to Exponent, but -- but it was taped to a</p> <p>4 glass slide and a sample was cut away from that</p> <p>5 slide -- from that tape and also sent back to</p> <p>6 Exponent to be tested using FTIR analysis?</p> <p>7 MR. HUTCHINSON: Object to form. Counsel,</p> <p>8 it's argumentative.</p> <p>9 MR. THORNBURGH: It's not.</p> <p>10 MR. HUTCHINSON: Yes, it is.</p> <p>11 BY MR. THORNBURGH:</p> <p>12 Q. Please answer the question.</p> <p>13 MR. HUTCHINSON: I think you are getting</p> <p>14 frustrated. Also, it's been asked and answered.</p> <p>15 THE WITNESS: Sir, we have provided a</p> <p>16 record of the experiments performed to you in the</p> <p>17 form of an electronic laboratory notebook. It's in</p> <p>18 the records and the documents produced. It's in</p> <p>19 several of the documents produced.</p> <p>20 It also -- we have, as traceability of the</p> <p>21 sample sent, not only in the QC custody record -- or</p> <p>22 the chain of custody record, excuse me, from</p> <p>23 Histion, but also, if you were here to observe, in</p> <p>24 the actual samples that have been sent back from the</p> <p>25 lab, all of them are documented in Exhibit No. 5.</p>	<p>1 BY MR. THORNBURGH:</p> <p>2 Q. I really am trying to understand your</p> <p>3 testimony. I really am. I'm doing my best.</p> <p>4 MR. HUTCHINSON: All right.</p> <p>5 MR. THORNBURGH: So --</p> <p>6 MR. HUTCHINSON: Hey, well, Dan, we have</p> <p>7 asked the same question several times. Let's --</p> <p>8 we -- you need to move on.</p> <p>9 MR. THORNBURGH: No.</p> <p>10 MR. HUTCHINSON: Do you understand?</p> <p>11 MR. THORNBURGH: No, no, not until I</p> <p>12 understand how I can verify this. So --</p> <p>13 MR. HUTCHINSON: Well, the witness has</p> <p>14 answered your question.</p> <p>15 MR. THORNBURGH: Yes.</p> <p>16 MR. HUTCHINSON: You asked that specific</p> <p>17 question. She gave you a paragraph answer. And</p> <p>18 it's not my problem that you can't understand it.</p> <p>19 MR. THORNBURGH: Hold on. Hold on, Chad.</p> <p>20 Quit being rude.</p> <p>21 Q. Dr. Benight, you just testified that the</p> <p>22 QUV-treated samples would have been taped against a</p> <p>23 glass slide and that the slide that was returned to</p> <p>24 you doesn't have mesh remnants on it, right?</p> <p>25 A. The slide you are referring to is labeled</p>
Page 183	Page 185
<p>1 And I have also stated that to you today,</p> <p>2 sir. I have been very polite in answering your</p> <p>3 questions.</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. Okay. So let's assume what you are</p> <p>6 telling me is correct, for the sake of argument.</p> <p>7 A. I'm under oath, sir.</p> <p>8 Q. Okay. So let's assume it's true.</p> <p>9 Who would have cut a piece of -- so you</p> <p>10 testified earlier that the samples that you received</p> <p>11 back from Histion are taped to a glass slide and the</p> <p>12 sample may have been cut away from that tape and</p> <p>13 then produced or returned back to Exponent to be</p> <p>14 analyzed using FTIR?</p> <p>15 MR. HUTCHINSON: Object to form. Compound</p> <p>16 question.</p> <p>17 THE WITNESS: No, that's incorrect, sir.</p> <p>18 I said that the way the samples were</p> <p>19 processed in the QUV chamber is they were taped</p> <p>20 against a glass slide.</p> <p>21 And the glass slide that was returned to</p> <p>22 me yesterday does not have mesh remnants on it, and</p> <p>23 it's also labeled as QUV oxidized No. 2 or</p> <p>24 H15-118-2, which is now in paraffin and resin and</p> <p>25 underwent the staining protocol.</p>	<p>1 "2 QUV oxidized." And that sample was processed</p> <p>2 according to Dr. Iakovlev's protocol by Histion.</p> <p>3 Q. Okay. But where did Exponent get its</p> <p>4 Sample 6 from on October 5th to test it using FTIR?</p> <p>5 A. Well, we measured several samples with</p> <p>6 FTIR. And the spectrum in Exhibit No. 21, labeled</p> <p>7 Sample No. 6, is likely part of the same sample,</p> <p>8 labeled 15-118-6, sent back to me yesterday from the</p> <p>9 lab.</p> <p>10 Q. Okay. So you say it's likely, but I</p> <p>11 interpret that as meaning that you don't know and</p> <p>12 you are speculating?</p> <p>13 MR. HUTCHINSON: Counsel, is that a</p> <p>14 question?</p> <p>15 MR. THORNBURGH: Yeah.</p> <p>16 Q. Am I -- is that -- is that an incorrect</p> <p>17 interpretation?</p> <p>18 MR. HUTCHINSON: I'm going to object to</p> <p>19 form.</p> <p>20 THE WITNESS: I don't understand the</p> <p>21 question.</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. Well, you said that --</p> <p>24 MR. THORNBURGH: Court Reporter, can you</p> <p>25 read back her answer to me, please, where she said,</p>

Stephanie Benight, Ph.D.

Page 186	Page 188
<p>1 "It's likely"?</p> <p>2 (Whereupon, a brief discussion off the</p> <p>3 record.)</p> <p>4 (Whereupon, the reporter read the record</p> <p>5 as follows:</p> <p>6 "Answer: Well, we measured several</p> <p>7 samples with FTIR. And the spectrum in Exhibit</p> <p>8 No. 21, labeled Sample No. 6, is likely part of the</p> <p>9 same sample, labeled 15-118-6, sent back to me</p> <p>10 yesterday from the lab.")</p> <p>11 MR. HUTCHINSON: And, Dan, if you -- if</p> <p>12 you have a document or something that you want to</p> <p>13 show the witness, that would be helpful. Again, we</p> <p>14 have three flash drives here, so that would be</p> <p>15 helpful, if you could show her a document.</p> <p>16 MR. THORNBURGH: I'm just trying to</p> <p>17 understand what she means when she says, "likely."</p> <p>18 Q. Does that mean that it is the same sample</p> <p>19 or that you think it might be the same sample?</p> <p>20 MR. HUTCHINSON: Object to form.</p> <p>21 THE WITNESS: Sir, as I have already</p> <p>22 mentioned, Sample 15-118-6 and a sample labeled</p> <p>23 H15-118-2 were returned to me yesterday from the</p> <p>24 lab.</p> <p>25 Both of these samples were processed in</p>	<p>1 were originally sent to Histon, which is in the</p> <p>2 chain of custody document and also the project plan.</p> <p>3 And I believe the project plan said August 20th.</p> <p>4 Q. Okay. Who at Exponent divided Sample No.</p> <p>5 6?</p> <p>6 A. It would have been me or another one of my</p> <p>7 associates.</p> <p>8 Q. And do you recall having done that?</p> <p>9 A. I don't recall who specifically cut the</p> <p>10 sample, sir.</p> <p>11 Q. You don't personally recall doing that</p> <p>12 yourself, correct?</p> <p>13 A. I may have. It also could have easily</p> <p>14 been someone else doing it at my direction.</p> <p>15 Q. Do you have any internal documentation</p> <p>16 that would verify for me when Sample 6 was divided</p> <p>17 and who divided it?</p> <p>18 A. Sir, this sample that we're discussing was</p> <p>19 sent to Histon, according to the documents, on</p> <p>20 August 20th.</p> <p>21 Q. That's not an answer to my question, with</p> <p>22 all due respect.</p> <p>23 Please point me to an internal document</p> <p>24 that would allow me to verify when Sample No. 6</p> <p>25 would have been divided and by whom Sample No. 6 was</p>
Page 187	Page 189
<p>1 the same QUV chamber under the same conditions at</p> <p>2 the same time for the same amount of time, and they</p> <p>3 were both returned to me yesterday.</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. So I understand that.</p> <p>6 But we have a document that indicates that</p> <p>7 on October 5th, 2015, when the sample that you</p> <p>8 received in your possession, Number 15-118-6 was at</p> <p>9 Histon, but during that same time, that Sample 6</p> <p>10 was tested by FTIR analysis.</p> <p>11 And so I think I understand what you are</p> <p>12 saying.</p> <p>13 You are saying it's very likely that</p> <p>14 Sample 15-118-6 is the same sample that was tested</p> <p>15 on October 5th, 2015, right?</p> <p>16 MR. HUTCHINSON: Object to form.</p> <p>17 THE WITNESS: Well, it's -- it's from the</p> <p>18 same mesh sample. You can think of it as if they</p> <p>19 were divided and part of it remained at Exponent and</p> <p>20 the rest of it was sent to Histon.</p> <p>21 BY MR. THORNBURGH:</p> <p>22 Q. When was Sample 6 divided, with a portion</p> <p>23 of Sample 6 being sent to Histon and the remaining</p> <p>24 portion being stored and preserved at Exponent?</p> <p>25 A. That would have occurred when the samples</p>	<p>1 divided?</p> <p>2 A. Sample No. 6 -- or the QUV oxidized</p> <p>3 samples, rather, were sent to Histon on</p> <p>4 August 20th.</p> <p>5 Q. Okay. Please point me to an internal</p> <p>6 Exponent document that would verify on what date</p> <p>7 Sample No. 6 was divided and by whom?</p> <p>8 MR. HUTCHINSON: Objection. Been asked</p> <p>9 and answered, Counsel. She just told you</p> <p>10 August 20th.</p> <p>11 MR. THORNBURGH: That doesn't tell me by</p> <p>12 whom. It doesn't tell me who would have divided it.</p> <p>13 It doesn't verify the testimony that she is giving.</p> <p>14 MR. HUTCHINSON: All right. Calm down,</p> <p>15 Dan. I'm going to make my objection. It's been</p> <p>16 asked and answered.</p> <p>17 You can answer, Dr. Benight.</p> <p>18 THE WITNESS: The QUV process sample that</p> <p>19 was sent to the lab and used as the set of</p> <p>20 experiments that we conducted as the basis for</p> <p>21 Dr. MacLean's microscopy report were sent to the lab</p> <p>22 on August 20th. It says that in the project plan.</p> <p>23 MR. THORNBURGH: Chad, you want to take a</p> <p>24 minute and talk to your witness?</p> <p>25 MR. HUTCHINSON: For -- about what? You</p>

48 (Pages 186 to 189)

Stephanie Benight, Ph.D.

Page 190	Page 192
<p>1 talking about redirect?</p> <p>2 MR. THORNBURGH: Ask -- no, to ask her to</p> <p>3 answer my question.</p> <p>4 MR. HUTCHINSON: Counsel, I'm not going to</p> <p>5 argue with you, so let that be clear. She just told</p> <p>6 you it says that in the project plan and it was on</p> <p>7 August the 20th, so I'm going to object --</p> <p>8 MR. THORNBURGH: It says --</p> <p>9 MR. HUTCHINSON: -- and instruct the</p> <p>10 witness not to answer any more questions about that</p> <p>11 because --</p> <p>12 MR. THORNBURGH: You are -- you are</p> <p>13 instructing her not to answer any more -- that's</p> <p>14 fine. If you instruct her not to answer any more</p> <p>15 questions, that's okay. We're taking this entire</p> <p>16 deposition up with the Court.</p> <p>17 MR. HUTCHINSON: All right. Well, Dan, my</p> <p>18 point to you is, you have asked this question. I'm</p> <p>19 trying to work this out with you.</p> <p>20 MR. THORNBURGH: But she hasn't answered.</p> <p>21 MR. HUTCHINSON: Why don't we take a quick</p> <p>22 break, and that will give you time to calm down. I</p> <p>23 know you are frustrated, okay?</p> <p>24 MR. THORNBURGH: I just want some answers</p> <p>25 to simple questions. That's all I'm looking for.</p>	<p>1 BY MR. THORNBURGH:</p> <p>2 Q. Dr. Benight, are you also the person who</p> <p>3 took the photomicrographs that were produced in this</p> <p>4 case?</p> <p>5 A. Which photomicrographs are you referring</p> <p>6 to, sir?</p> <p>7 Q. Well, so let me ask you -- get some</p> <p>8 more -- a broader question.</p> <p>9 Did you take any photomicrographs?</p> <p>10 A. Yes.</p> <p>11 Q. Okay. And you took -- did other -- did</p> <p>12 other employees at Exponent take photomicrographs?</p> <p>13 A. Yes.</p> <p>14 Q. Okay. What specimens did you take</p> <p>15 photomicrographs of?</p> <p>16 A. I acquired photomicrographs of the samples</p> <p>17 that were processed by Histon.</p> <p>18 Q. Which samples; do you know?</p> <p>19 A. The -- all of the photomicrographs that</p> <p>20 are in the production in Exhibit 6 that are</p> <p>21 photomicrographs of processed sections that have</p> <p>22 gone through the staining protocol, those are the</p> <p>23 images that I acquired.</p> <p>24 Q. Okay. And did you have any input into</p> <p>25 which photomicrographs became part of the final</p>
Page 191	Page 193
<p>1 They're very simple questions.</p> <p>2 MR. HUTCHINSON: We'll take a quick break.</p> <p>3 THE VIDEOGRAPHER: Going off the record at</p> <p>4 5:16.</p> <p>5 (Whereupon, a brief recess was taken.)</p> <p>6 THE VIDEOGRAPHER: This is the beginning</p> <p>7 of Tape No. 4. We're back on the record at 5:26.</p> <p>8 BY MR. THORNBURGH:</p> <p>9 Q. Doctor, before we went off the record, I</p> <p>10 asked you to identify for me an internal Exponent</p> <p>11 document which would confirm or verify for me that</p> <p>12 Sample No. 6 was divided and it was -- and who</p> <p>13 divided the Sample No. 6.</p> <p>14 Do you have an internal Exponent document</p> <p>15 that you can refer me to, to verify your testimony?</p> <p>16 A. I don't know that I can refer you to an</p> <p>17 internal Exponent document that states exactly what</p> <p>18 you have said.</p> <p>19 Q. That was an answer to my question, it</p> <p>20 feels good, doesn't it.</p> <p>21 MR. HUTCHINSON: Hey -- hey, Dan, please</p> <p>22 do not argue. I don't know if that was meant to be</p> <p>23 argumentative or not.</p> <p>24 MR. THORNBURGH: It was not.</p> <p>25 MR. HUTCHINSON: Good.</p>	<p>1 report issued by Dr. MacLean?</p> <p>2 A. Yes.</p> <p>3 Q. And what input did you provide?</p> <p>4 A. Well, I helped prepare the report in a</p> <p>5 general sense.</p> <p>6 Q. Okay. Did you -- was it your opinion that</p> <p>7 the specimen that was processed by -- strike that.</p> <p>8 Was it your opinion that the specimen that</p> <p>9 was -- or the sample, Sample No. 2, that was treated</p> <p>10 with QUV photooxidation did not become -- that the</p> <p>11 TVT fiber itself did not stain?</p> <p>12 A. I am not prepared to offer any opinions</p> <p>13 today on that.</p> <p>14 Q. Did -- but did you provide any opinions</p> <p>15 or -- did you provide any opinions to Dr. MacLean</p> <p>16 regarding your work in this case?</p> <p>17 A. I acquired images and made them available</p> <p>18 to Dr. MacLean.</p> <p>19 Q. And you chose what images would become</p> <p>20 part of the report?</p> <p>21 A. I helped with the report in general and I</p> <p>22 selected some images to show Dr. MacLean, but I also</p> <p>23 showed him all of the images. They were made</p> <p>24 available to him.</p> <p>25 MR. THORNBURGH: Okay. Let's look at 8 --</p>

49 (Pages 190 to 193)

Stephanie Benight, Ph.D.

Page 194	Page 196
<p>1 the document marked as Exhibit No. 20 -- I think</p> <p>2 we're at 23, the document that I provided to the</p> <p>3 court reporter as 8A.</p> <p>4 (Whereupon, a brief discussion off the</p> <p>5 record.)</p> <p>6 (Whereupon, Exhibit 22 was marked for</p> <p>7 identification.)</p> <p>8 BY MR. THORNBURGH:</p> <p>9 Q. Dr. Benight, is this one of the images</p> <p>10 that you took?</p> <p>11 A. It looks like it.</p> <p>12 Q. Okay. And this would have been of Sample</p> <p>13 No. 2?</p> <p>14 A. It doesn't have a label on it, sir.</p> <p>15 Q. Well, couldn't you provide only Sample</p> <p>16 No. -- didn't Histon only process Sample No. 2 from</p> <p>17 the QUV-treated samples?</p> <p>18 A. Histon processed an exemplar pristine</p> <p>19 control mesh sample, a QUV process sample, and a</p> <p>20 chemically oxidized process sample as well as a</p> <p>21 control piece of tissue.</p> <p>22 Q. Right. And so this was sent to us,</p> <p>23 identified as 2A 100X xpole 0028.</p> <p>24 Okay?</p> <p>25 A. Okay.</p>	<p>1 MR. HUTCHINSON: Object to form.</p> <p>2 THE WITNESS: Yes, I'm looking at the</p> <p>3 photo.</p> <p>4 BY MR. THORNBURGH:</p> <p>5 Q. All right. Do you know why the photo was</p> <p>6 taken in a way that blurred out the core in the</p> <p>7 picture?</p> <p>8 MR. HUTCHINSON: Object to form.</p> <p>9 THE WITNESS: In my experience in</p> <p>10 analyzing these samples, it's difficult to focus</p> <p>11 within the entire plane of the sample to be in</p> <p>12 focus.</p> <p>13 So it makes sense to me that part of the</p> <p>14 sample would appear in focus and part of it would</p> <p>15 not. That's not unusual.</p> <p>16 MR. THORNBURGH: We can go ahead -- let's</p> <p>17 go ahead and mark the document I have provided the</p> <p>18 court reporter as 8B as Exhibit No. 23.</p> <p>19 (Whereupon, a brief discussion off the</p> <p>20 record.)</p> <p>21 (Whereupon, Exhibit 23 was marked for</p> <p>22 identification.)</p> <p>23 BY MR. THORNBURGH:</p> <p>24 Q. Okay. Doctor, this was provided to us</p> <p>25 with a title of 2A 100X BF.</p>
Page 195	Page 197
<p>1 Q. Does that indicate to you that this is a</p> <p>2 photomicrograph of a fiber from Sample No. 2?</p> <p>3 A. Yes. Sample 2 in the image files</p> <p>4 indicates that it was QUV-oxidized processed.</p> <p>5 Q. And you took this image, correct?</p> <p>6 A. No, this image was taken by personnel at</p> <p>7 Histon at my instruction.</p> <p>8 Q. Okay. I thought that you had testified</p> <p>9 that you had performed the -- the microphotographs</p> <p>10 or the photomicrographs?</p> <p>11 A. I took several images of photomicrographs</p> <p>12 of samples, but there were some additional</p> <p>13 photomicrographs that were taken by Histon</p> <p>14 personnel.</p> <p>15 Q. Okay. So it's your testimony that this is</p> <p>16 one that was taken by Histon personnel?</p> <p>17 A. Yeah, with the file name that you gave me,</p> <p>18 yes, that's correct.</p> <p>19 Q. And was that a technician at Histon?</p> <p>20 A. I don't know his role, but it was an</p> <p>21 employee of Histon.</p> <p>22 Q. And do you know why the photomicrograph</p> <p>23 that was taken was taken with -- is very blurry? Do</p> <p>24 you see how the core of the fiber is blurred out?</p> <p>25 Do you see that?</p>	<p>1 Is -- would this have been a</p> <p>2 photomicrograph that was taken by the same personnel</p> <p>3 at Histon?</p> <p>4 A. Yes.</p> <p>5 Q. And Exhibit No. 22 and 23 are exhibits --</p> <p>6 or photomicrographs that actually made it into the</p> <p>7 report, correct?</p> <p>8 A. I don't have a copy of the report in front</p> <p>9 of me, sir.</p> <p>10 MR. THORNBURGH: Well, let's just do this</p> <p>11 real quick. The document titled: "H" -- or "8C"</p> <p>12 we'll mark it as Exhibit 24.</p> <p>13 (Whereupon, Exhibit 24 was marked for</p> <p>14 identification.)</p> <p>15 BY MR. THORNBURGH:</p> <p>16 Q. Doctor, this was sent to us with the title</p> <p>17 2A_0074.</p> <p>18 Would this have been an image or</p> <p>19 photomicrograph that would have been taken by you or</p> <p>20 somebody else?</p> <p>21 A. By me, sir.</p> <p>22 Q. Okay. And do you -- on this image, do you</p> <p>23 see a -- on the outer -- very outer edge or outer</p> <p>24 shell of the Prolene fiber from the TVT, that it's</p> <p>25 stained pink?</p>

50 (Pages 194 to 197)

Stephanie Benight, Ph.D.

Page 198	Page 200
<p>1 A. The whole slide, including the background, 2 looks pink. 3 Q. But the -- do you see the edge of the 4 fiber, do you see how there is a thin pink line that 5 runs all the way around that fiber? 6 MR. HUTCHINSON: Object to form. 7 THE WITNESS: Sir, the whole image looks 8 pink. 9 BY MR. THORNBURGH: 10 Q. Do you all have a pink image? 11 A. Well, there is some blue in the image. 12 Q. Okay. Do you see the pink outer layer 13 surrounding the mesh fiber? 14 MR. HUTCHINSON: Same objection. 15 THE WITNESS: It's the same color as the 16 background and also within the specimen itself. 17 BY MR. THORNBURGH: 18 Q. It's actually -- well, I think what 19 happened is it printed out weird. 20 So do you have the thumb drive that was 21 marked as Exhibit No. 6 in front of you? 22 A. I can -- I can put it into the court 23 reporter's computer. 24 Q. Okay. Let's put it in and let's look at 25 2A_0074.</p>	<p>1 image, and you are asking her if she is looking at 2 something different than what you are looking at. 3 MR. THORNBURGH: Well -- 4 MR. HUTCHINSON: And since you are in 5 Pensacola and we're in California, that is going to 6 be difficult. So can you rephrase your question? 7 BY MR. THORNBURGH: 8 Q. Well, you would agree with me that the 9 photomicrograph of 2A_0075 would appear to have an 10 outer layer that is colored pink, wouldn't you agree 11 with that? 12 MR. HUTCHINSON: Object to form. 13 THE WITNESS: In 0075, the background, as 14 well as the sample, with the exception of the blue 15 granules, is pink. 16 BY MR. THORNBURGH: 17 Q. Oh, you said 75. I was referring to 0074. 18 A. Oh, I'm sorry. I think you had said 75. 19 The court reporter is nodding her head. 20 74, sir, also, the background and the 21 sample itself that contains blue granules looks 22 pink. 23 Q. Do you see the outer layer of that -- of 24 the fiber is a darker pink; would you agree with 25 that?</p>
Page 199	Page 201
<p>1 A. Okay. One moment. 2A_0074; is that 2 correct? 3 Q. Yes. 4 A. Okay. 5 Q. You have that image in front of you? 6 A. Yes. 7 Q. Okay. And do you see the mesh fiber? 8 A. Yes. 9 Q. Okay. And do you see the outer layer that 10 is stained pink? 11 MR. HUTCHINSON: Object to form. 12 THE WITNESS: Also on the electronic form, 13 the -- it's pink on either side of the outside of 14 the fiber. 15 BY MR. THORNBURGH: 16 Q. Do you see a darker -- what I'm looking at 17 on mine is a very clear image of a fiber that has an 18 outer pink layer. 19 Are you seeing something different on what 20 you have in front of you? 21 MR. HUTCHINSON: I'm sorry, Dan. I'm 22 going to have to object to that -- the question. 23 She doesn't know what -- or can't see what you are 24 looking at. 25 You say yours is very clear and a clear</p>	<p>1 MR. HUTCHINSON: Same objection. Counsel, 2 can you -- this not going to be a clear transcript 3 because, again, you are asking -- 4 MR. THORNBURGH: But let me -- let me just 5 ask you this -- let me -- let me just -- I'll 6 withdraw the question. 7 MR. HUTCHINSON: Okay. Thank you. 8 BY MR. THORNBURGH: 9 Q. Dr. Benight, I'll represent to you that 10 2A-0074 did not make it into the expert report by 11 Dr. MacLean. 12 Do you know why? 13 A. No, I don't. 14 Q. Did you have any input on whether or not 15 that image should be put into the report? 16 A. I don't recall if we discussed this 17 specific image. There's over a hundred images. 18 Q. But that image didn't make it, right? 19 MR. HUTCHINSON: Objection. Been asked 20 and answered. Counsel, she just told you she didn't 21 recall. 22 MR. THORNBURGH: I'll withdraw. I'll 23 withdraw. I'll withdraw. 24 MR. HUTCHINSON: Thank you. 25</p>

Stephanie Benight, Ph.D.

Page 202	Page 204
<p>1 BY MR. THORNBURGH:</p> <p>2 Q. Dr. Benight, did you conduct any</p> <p>3 additional studies that we haven't discussed today?</p> <p>4 A. Related to this work?</p> <p>5 Q. Yes.</p> <p>6 A. We have produced all of the records of the</p> <p>7 experiments performed related to the study that was</p> <p>8 performed to investigate whether intentionally</p> <p>9 oxidized Prolene stains with H&E.</p> <p>10 Q. But my question was, have we discussed</p> <p>11 today all of the studies or steps of studies that</p> <p>12 you or Exponent performed -- strike that.</p> <p>13 That you performed in this case?</p> <p>14 A. Yes.</p> <p>15 Q. In other words, there is no other studies</p> <p>16 that were conducted that I am unaware of; is that</p> <p>17 correct?</p> <p>18 A. All of the records of the experiments</p> <p>19 performed for this case have been produced to my</p> <p>20 knowledge.</p> <p>21 Q. I just have a couple of questions. Then</p> <p>22 I -- then I'm done.</p> <p>23 You have performed the QUV intentional</p> <p>24 oxidation process, right?</p> <p>25 A. We performed that at Exponent.</p>	<p>1 correct?</p> <p>2 A. I believe that we exposed them for</p> <p>3 24 hours --</p> <p>4 Q. All right.</p> <p>5 A. -- and then inspected them and then</p> <p>6 exposed them for an additional 48 hours and then</p> <p>7 inspected them and then exposed them for another</p> <p>8 48 hours, to total five days.</p> <p>9 Q. Okay. So did -- are you the person that</p> <p>10 what would have been part of that entire process?</p> <p>11 A. Yes, I was -- I was part of that process.</p> <p>12 Q. Were there other individuals that -- also</p> <p>13 part of that process?</p> <p>14 A. I don't recall. I do recall setting</p> <p>15 the -- the experiment up, sir.</p> <p>16 Q. Okay. So you set the experiment up. You</p> <p>17 put the machine in -- you put the samples into the</p> <p>18 machine. You turned it on. You set the settings.</p> <p>19 And in 24 hours you or somebody would have</p> <p>20 gone back to the machine, checked the settings, I</p> <p>21 assume, turned off the machine, opened up the</p> <p>22 machine, took out the samples, and then looked at</p> <p>23 the samples using scanning electron microscopy.</p> <p>24 Is that correct?</p> <p>25 A. Yes, except the machine turns off</p>
Page 203	Page 205
<p>1 Q. And were -- were you part of that process?</p> <p>2 A. Yes.</p> <p>3 Q. Okay. And the QUV machine, what is that</p> <p>4 machine called?</p> <p>5 A. I believe it is a Q-Lab Accelerated</p> <p>6 Weathering Chamber.</p> <p>7 Q. Okay. And was the Q-Lab Accelerated</p> <p>8 Weathering Chamber calibrated before you undertook</p> <p>9 the QUV treatment process?</p> <p>10 A. It's Exponent's practice to calibrate the</p> <p>11 laboratory equipment on a regular basis. It's</p> <p>12 either biannually or annually, I believe.</p> <p>13 Q. Okay. Do you run any -- the process of</p> <p>14 setting up the QUV machine, how does that process</p> <p>15 occur?</p> <p>16 A. Well, it's plugged in to an outlet, and</p> <p>17 there is a series of buttons where you program in</p> <p>18 the amount of time and the temperature and the</p> <p>19 magnitude of irradiance that you want to have run.</p> <p>20 Q. Okay. So you took some samples, you put</p> <p>21 it into the QUV machine, you set it on some -- on</p> <p>22 certain settings; is that right?</p> <p>23 A. Yes.</p> <p>24 Q. Okay. And then the samples would have</p> <p>25 remained in the QUV machine for five days; is that</p>	<p>1 automatically if you set the time for it to run, but</p> <p>2 everything else you stated was correct.</p> <p>3 Q. Okay. So at that first 24-hour mark, who</p> <p>4 went in, checked the settings, opened up the</p> <p>5 machine, took the samples out, and looked at the</p> <p>6 samples using scanning electron microscopy?</p> <p>7 A. I don't recall which specific personnel</p> <p>8 did, but the program that I had set up to run for</p> <p>9 24 hours would have completed by the time that</p> <p>10 someone, either myself or someone else, looked at</p> <p>11 the samples.</p> <p>12 Q. Okay. What internal document can you</p> <p>13 point me to that would confirm or verify for me who</p> <p>14 at Exponent, after the 24-hour period, went to the</p> <p>15 QUV machine, opened it up, took those samples out</p> <p>16 and looked at the samples under scanning electron</p> <p>17 microscopy?</p> <p>18 A. Well, in Production Exhibit No. 8 provided</p> <p>19 today, I believe we have SEM images of that 24-hour</p> <p>20 time period, but we're not required to say which</p> <p>21 specific staff person would have performed that</p> <p>22 exercise.</p> <p>23 Q. Okay. There is -- so there no internal</p> <p>24 document that would identify which staff member at</p> <p>25 Exponent would have performed that part of the step,</p>

Stephanie Benight, Ph.D.

Page 206	Page 208
<p>1 right?</p> <p>2 A. We're not required to write that down.</p> <p>3 Q. The protocol didn't require you to write</p> <p>4 that down, correct?</p> <p>5 A. Well, we're not required to indicate which</p> <p>6 specific staff member would have performed that</p> <p>7 action. And, really, it doesn't matter.</p> <p>8 Q. But the protocol that we talked about</p> <p>9 earlier didn't require, as part of the protocol, for</p> <p>10 that person to record somewhere in -- internally in</p> <p>11 Ethicon the who, what, when, where, and the date</p> <p>12 that that 24-hour process would have been conducted,</p> <p>13 right?</p> <p>14 MR. HUTCHINSON: Object to form. It's</p> <p>15 compound. Also been asked and answered.</p> <p>16 THE WITNESS: What is important is that --</p> <p>17 excuse me, sir. Let me finish.</p> <p>18 What is important is that the program was</p> <p>19 set up and SEM was performed after the program that</p> <p>20 was set for 24 hours stopped automatically and</p> <p>21 either myself or someone else imaged those with SEM.</p> <p>22 As I have stated, we're not required to</p> <p>23 write down which specific Exponent personnel does</p> <p>24 it.</p> <p>25</p>	<p>1 Dr. MacLean's report that the QUV process samples</p> <p>2 were exposed for a total of five days.</p> <p>3 I have told you and there is also SEM</p> <p>4 imaging as a traceability record to show that there</p> <p>5 is SEM images after 24 hours, there is SEM images</p> <p>6 after an additional 48 hours, and then there is SEM</p> <p>7 images after the total of five days prior to when</p> <p>8 the samples were analyzed with FTIR and then sent to</p> <p>9 Histion.</p> <p>10 BY MR. THORNBURGH:</p> <p>11 Q. Okay. That doesn't answer my question.</p> <p>12 My question was, what internal Exponent</p> <p>13 document do I look to, to confirm, number one, who</p> <p>14 would have started up the second phase of the QUV</p> <p>15 process and whether or not they confirmed that the</p> <p>16 settings were set consistent with the protocol?</p> <p>17 MR. HUTCHINSON: Objection. Compound</p> <p>18 question. Argumentative.</p> <p>19 THE WITNESS: As I mentioned, you know,</p> <p>20 we're not required to say which person or staff set</p> <p>21 the settings. There might be security footage. I</p> <p>22 don't know if it is present in that lab.</p> <p>23 But, you know, in the report authored by</p> <p>24 Dr. MacLean, we exposed the samples for a total of</p> <p>25 five days.</p>
Page 207	Page 209
<p>1 BY MR. THORNBURGH:</p> <p>2 Q. And sitting here today, you can't tell me</p> <p>3 who it was, right?</p> <p>4 A. I don't recall after -- at that point, as</p> <p>5 I mentioned, there were three time points. I can't</p> <p>6 recall at the 24-hour time point who did that.</p> <p>7 Q. Okay. So after those samples were -- one</p> <p>8 or more of those samples were looked at under SEM</p> <p>9 after the first 24-hour period, who started the</p> <p>10 machine back up?</p> <p>11 A. It was either myself or someone else at my</p> <p>12 direction.</p> <p>13 Q. Okay. What internal Exponent document can</p> <p>14 I look to, to verify who would have started the</p> <p>15 machine back up?</p> <p>16 A. As I mentioned, we're not required to</p> <p>17 state which specific person performed that action,</p> <p>18 sir.</p> <p>19 Q. Well, what internal document can I look</p> <p>20 to, to see at this -- you know, after the first</p> <p>21 24-hour period that the settings were set the way</p> <p>22 they were supposed to be set under the terms of the</p> <p>23 protocol?</p> <p>24 MR. HUTCHINSON: Object. Form.</p> <p>25 THE WITNESS: It was described in</p>	<p>1 BY MR. THORNBURGH:</p> <p>2 Q. I understand that -- you know, it says</p> <p>3 that the -- the expert report, which was created</p> <p>4 after the experiment, states that it was radiated</p> <p>5 with .98 and it's got this little algorithm for, I</p> <p>6 guess, the level of radiation, then it says "UVB at</p> <p>7 60 degrees Celsius for five days."</p> <p>8 I'm trying to figure out who would have</p> <p>9 confirmed during the second phase of the QUV process</p> <p>10 that those settings were reentered for the second</p> <p>11 period of time of the QUV experiment?</p> <p>12 MR. HUTCHINSON: Object to form.</p> <p>13 THE WITNESS: Well, as far as the</p> <p>14 instrument itself, the same program that was</p> <p>15 programmed before, when you reload it, is on the</p> <p>16 instrument, and so it would have been a matter of</p> <p>17 changing the time period from 24 hours to 48 hours.</p> <p>18 BY MR. THORNBURGH:</p> <p>19 Q. Okay. But what it --</p> <p>20 A. So that leaves very little room for error</p> <p>21 there. And --</p> <p>22 Q. Okay. But --</p> <p>23 MR. HUTCHINSON: I'm sorry.</p> <p>24 Dr. Benight, finish your answer.</p> <p>25 MR. THORNBURGH: I thought -- I thought</p>

53 (Pages 206 to 209)

Stephanie Benight, Ph.D.

Page 210	Page 212
<p>1 she was done, sorry.</p> <p>2 THE WITNESS: That's it.</p> <p>3 BY MR. THORNBURGH:</p> <p>4 Q. So the answer is no, there is no internal</p> <p>5 document that I can look to, to confirm that the</p> <p>6 settings would have been the same settings that were</p> <p>7 required under the protocol?</p> <p>8 A. Sir, it says in our microscopy report, the</p> <p>9 report authored by Dr. MacLean, that the samples</p> <p>10 were exposed at .98 watts per meters squared</p> <p>11 irradiance for five days at 60 degrees C. That's</p> <p>12 what we did.</p> <p>13 And there are SEM images at intermittent</p> <p>14 time points, which I have already explained to you,</p> <p>15 of those samples.</p> <p>16 Q. I understand that's your testimony.</p> <p>17 But you understand that the report by</p> <p>18 Dr. MacLean was signed by him at some period after</p> <p>19 those experiments were already conducted, right?</p> <p>20 A. Well, we can't write the report before the</p> <p>21 experiments are conducted, sir. So, yes --</p> <p>22 Q. I --</p> <p>23 A. -- the report was created after all the</p> <p>24 experiments were performed.</p> <p>25 Q. But -- let me try to answer -- maybe ask</p>	<p>1 Exhibit No. 18, correct?</p> <p>2 MR. HUTCHINSON: Object to form.</p> <p>3 Argumentative. Also, Dan -- all right. Just strike</p> <p>4 that.</p> <p>5 Just object to form.</p> <p>6 THE WITNESS: Sir, I have already</p> <p>7 testified that we have provided a record of the</p> <p>8 experiments performed as part of the production</p> <p>9 provided to you electronically.</p> <p>10 And in that production, you know, there</p> <p>11 are not handwritten notes, which appears to be what</p> <p>12 is on Exhibit No. 18. They are all provided</p> <p>13 electronically.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. Okay. So after somebody at Exponent would</p> <p>16 have taken the mesh samples from the SEM and put</p> <p>17 them back into the machine, they would have set the</p> <p>18 machine for a period of what time?</p> <p>19 A. Well, there were three different time</p> <p>20 points. The first experiment or time point that was</p> <p>21 set up was for 24 hours.</p> <p>22 And then after the -- for the second time</p> <p>23 point, it was for an additional 48 hours. And then</p> <p>24 that is documented in the SEM images acquired. And</p> <p>25 then an additional 48 hours after that, to total</p>
Page 211	Page 213
<p>1 it an easier way.</p> <p>2 Remember when we looked at Exhibit No. 18,</p> <p>3 which was Dr. Ong's lab notebook from the Lewis</p> <p>4 versus Ethicon litigation?</p> <p>5 A. I have Document -- Exhibit No. 18 in front</p> <p>6 of me.</p> <p>7 Q. Okay. So whoever would have come in and</p> <p>8 would have put the mesh specimens back into the QUV</p> <p>9 machine didn't document that process or the steps</p> <p>10 that they performed or the settings that were set at</p> <p>11 that time in a document similar to Exhibit No. 18,</p> <p>12 correct?</p> <p>13 A. Well, sir, I don't see any QUV experiments</p> <p>14 in Exhibit No. 18.</p> <p>15 Q. That wasn't my question.</p> <p>16 A. And I also -- I also don't see any</p> <p>17 settings of that instrument in here.</p> <p>18 Q. That wasn't my question.</p> <p>19 A. Oh, okay.</p> <p>20 Q. My question was -- my question was simply,</p> <p>21 whoever would have come in after the first 24-hour</p> <p>22 period and put the mesh samples back into the</p> <p>23 machine and then set the machine at the settings</p> <p>24 required under the protocol didn't document those</p> <p>25 steps that were taken in a document similar to</p>	<p>1 five days, there were SEM images acquired.</p> <p>2 Q. Okay. And how did you come to understand</p> <p>3 that there would be this process that would be</p> <p>4 followed, that the mesh would be exposed to the</p> <p>5 QUV -- in the QUV machine for 24 hours, then looked</p> <p>6 at under scanning electron microscopy, and then put</p> <p>7 into the machine again for another 48 hours, and</p> <p>8 then looked at under scanning electron microscopy,</p> <p>9 and then put back into the machine for a final</p> <p>10 48 hours?</p> <p>11 MR. HUTCHINSON: Objection.</p> <p>12 BY MR. THORNBURGH:</p> <p>13 Q. How did that -- how did it come about that</p> <p>14 that process was followed or determined?</p> <p>15 MR. HUTCHINSON: Object to form.</p> <p>16 THE WITNESS: Well, we wanted to</p> <p>17 investigate what the samples looked like after</p> <p>18 incremental exposure to QUV.</p> <p>19 BY MR. THORNBURGH:</p> <p>20 Q. Okay. So was there a written protocol</p> <p>21 that said, "Exponent will perform the QUV steps in</p> <p>22 the following ways: You will expose the manner for</p> <p>23 24 hours, after that 24-hour period you will look at</p> <p>24 it using scanning electron microscopy, and then you</p> <p>25 will do the same thing for two additional intervals</p>

54 (Pages 210 to 213)

Stephanie Benight, Ph.D.

Page 214	Page 216
<p>1 of 48 hours"?</p> <p>2 Was there some written protocol that you</p> <p>3 received that told you that was the process you were</p> <p>4 to follow?</p> <p>5 MR. HUTCHINSON: Object to form.</p> <p>6 THE WITNESS: Well, from a fundamental</p> <p>7 perspective, we did QUV treatment of the polymer</p> <p>8 samples because that's covered in over hundreds of</p> <p>9 literature articles and -- including intentionally</p> <p>10 oxidizing polymer samples.</p> <p>11 And for a specific protocol, we talked</p> <p>12 about earlier we followed that of Dr. Reitman, et</p> <p>13 al., given in a conference presentation.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. The -- but did Dr. Reitman, et al.,</p> <p>16 conference presentation instruct -- provide you</p> <p>17 instruction to photooxidize these samples for</p> <p>18 24 hours, to look at them using scanning electron</p> <p>19 microscopy, then photooxidize them for another</p> <p>20 48 hours, look at those samples using scanning</p> <p>21 electron microscopy, and then continue the process</p> <p>22 for another 48 hours?</p> <p>23 MR. HUTCHINSON: Dan, in all candor,</p> <p>24 that's about six questions in one. Can you rephrase</p> <p>25 your question, please?</p>	<p>1 written protocol that explained or spelled out how</p> <p>2 these -- this process would take place?</p> <p>3 MR. HUTCHINSON: I understand. I am going</p> <p>4 to object to form to the extent it's been asked and</p> <p>5 answered. You asked this same series of questions</p> <p>6 at the very beginning of the deposition.</p> <p>7 THE WITNESS: We intentionally treated the</p> <p>8 samples with QUV for a total of five days.</p> <p>9 And as part of the experiments we carried</p> <p>10 out, we chose to expose them first for 24 hours and</p> <p>11 then monitor via SEM what the morphology of the</p> <p>12 samples looked like before proceeding for an</p> <p>13 additional 48 hours and another additional 48 hours.</p> <p>14 BY MR. THORNBURGH:</p> <p>15 Q. You would agree with me that the hundreds</p> <p>16 of articles that you keep referring to all have</p> <p>17 different protocols in place, right?</p> <p>18 A. I'm sure that they all vary to some</p> <p>19 extent, but when I referred to the hundreds of</p> <p>20 articles, I was referring to QUV as a method to</p> <p>21 induce changes in polymers, including oxidation.</p> <p>22 Q. Were any of those articles from which you</p> <p>23 testify you -- you derived the protocol produced to</p> <p>24 us -- or to me in Exhibits No. 6, 7, or 8?</p> <p>25 A. My knowledge and experience tells me from</p>
Page 215	Page 217
<p>1 MR. THORNBURGH: Yeah, the -- I'm just</p> <p>2 trying to understand, she said she -- she said there</p> <p>3 was --</p> <p>4 MR. HUTCHINSON: I understand that, but</p> <p>5 what we need is we need a clean record. And we need</p> <p>6 better questions that I can understand, at least.</p> <p>7 MR. THORNBURGH: I think -- I think the --</p> <p>8 I think I understand the testimony. I think it's</p> <p>9 pretty simple.</p> <p>10 Q. There was no written protocol that</p> <p>11 explicitly told you to photooxidize those specimens</p> <p>12 in the QUV machine for -- during those three</p> <p>13 intervals and to -- and in between those intervals,</p> <p>14 to look at the specimen for -- using scanning</p> <p>15 electron microscopy, right?</p> <p>16 MR. HUTCHINSON: Okay. I'm going to</p> <p>17 object to form. Also object to the extent it's been</p> <p>18 asked and answered. Dan, you covered this earlier</p> <p>19 in the deposition, if you may remember.</p> <p>20 MR. THORNBURGH: Well, this -- no, this</p> <p>21 was the first -- this was the first time that --</p> <p>22 that she testified that there was these three</p> <p>23 intervals.</p> <p>24 Q. And I'm just trying to understand, before</p> <p>25 the -- before the experiment began, was there a</p>	<p>1 those hundreds of articles, sir, that that is</p> <p>2 well-understood in the literature.</p> <p>3 Q. That wasn't my question. With all due</p> <p>4 respect, my question was very simple.</p> <p>5 Were any of those published articles from</p> <p>6 which you derived this protocol produced to me in</p> <p>7 Exhibits No. 6, 7, or 8?</p> <p>8 A. No. The protocol that we followed was</p> <p>9 documented in the microscopy report authored by</p> <p>10 Dr. MacLean which was given to you. That's a record</p> <p>11 of our experiments performed, sir.</p> <p>12 MR. THORNBURGH: Well, just real quick,</p> <p>13 let's mark as Exhibit No. 25 -- I think it's 24 --</p> <p>14 we have Exhibit 25, Dr. MacLean's expert report real</p> <p>15 quick.</p> <p>16 (Whereupon, Exhibit 25 was marked for</p> <p>17 identification.)</p> <p>18 THE WITNESS: I have Exhibit No. 25 in</p> <p>19 front of me.</p> <p>20 BY MR. THORNBURGH:</p> <p>21 Q. Okay. If you turn to -- to page No. 8 of</p> <p>22 Exhibit 25.</p> <p>23 A. Okay.</p> <p>24 Q. Okay. You see where it says, "Sections of</p> <p>25 Prolene mesh were placed inside the Q-Lab QUV</p>

Stephanie Benight, Ph.D.

Page 218	Page 220
<p>1 Accelerated Weathering Tester and irradiated with</p> <p>2 .98 W over M squared UV dash -- UV minus A and UV</p> <p>3 minus B at 60 degrees Celsius for five days"?</p> <p>4 Do you see that?</p> <p>5 A. Yes.</p> <p>6 Q. Is there a --</p> <p>7 MR. HUTCHINSON: All right, Dan, could you</p> <p>8 slow -- excuse me, Dan. Could you slow down just a</p> <p>9 minute for the court reporter, please?</p> <p>10 MR. THORNBURGH: Yep, yep.</p> <p>11 Q. And do you see at the end of that sentence</p> <p>12 where that protocol is discussed, there is no</p> <p>13 reference to any article or to Dr. Reitman's</p> <p>14 presentation, right?</p> <p>15 A. I don't see a reference in this section.</p> <p>16 There is also not a reference after the</p> <p>17 aforementioned sentence of, "A clean razor blade was</p> <p>18 used to cut sections for laboratory analysis."</p> <p>19 Q. Move to strike. Nonresponsive.</p> <p>20 For the -- who -- did you perform all the</p> <p>21 chemical oxidation steps?</p> <p>22 A. Myself and also other associates did.</p> <p>23 Q. Okay. And did those samples remain in the</p> <p>24 chemicals for 4.5 weeks; is that correct?</p> <p>25 A. Yes. Samples were incubated at 37 degrees</p>	<p>1 some sort of contemporaneous record that documented</p> <p>2 who would have periodically confirmed that the</p> <p>3 settings remained at 37 degrees C, right?</p> <p>4 MR. HUTCHINSON: Objection.</p> <p>5 Argumentative.</p> <p>6 THE WITNESS: We're not required to say</p> <p>7 who checks on things, sir, and record that</p> <p>8 information.</p> <p>9 MR. THORNBURGH: I have no further</p> <p>10 questions, but will obviously -- maybe -- probably</p> <p>11 will have some questions after Mr. Hutchinson asks</p> <p>12 you some questions on direct.</p> <p>13 MR. HUTCHINSON: All right. We'll take a</p> <p>14 quick break.</p> <p>15 MR. THORNBURGH: All right. How long you</p> <p>16 want?</p> <p>17 MR. HUTCHINSON: We'll see. I'll do the</p> <p>18 best I can to make it as quickly --</p> <p>19 MR. THORNBURGH: I said how long do you</p> <p>20 want on the break?</p> <p>21 MR. HUTCHINSON: I'll get back to you.</p> <p>22 THE VIDEOGRAPHER: Going off the record at</p> <p>23 6:07.</p> <p>24 (Whereupon, a brief recess was taken.)</p> <p>25 THE VIDEOGRAPHER: Back on the record at</p>
Page 219	Page 221
<p>1 for up to five weeks in oxidative media composed of</p> <p>2 .1 M CoCl₂ in 20 weight percent H₂O₂.</p> <p>3 Q. Okay. You say "incubated."</p> <p>4 What do you mean by that?</p> <p>5 A. They were -- they were heated to</p> <p>6 37 degrees C once in the oxidative media and stored</p> <p>7 at that temperature.</p> <p>8 Q. Okay. Somebody periodically checked to</p> <p>9 make sure the -- the incubator settings were --</p> <p>10 remained set at 37 degrees C for the -- for the --</p> <p>11 during the entire process, the -- four-and-a-half</p> <p>12 week process?</p> <p>13 A. Yes. I mean, the -- once the instrument</p> <p>14 is set at that temperature, it doesn't change. And</p> <p>15 so -- but to answer your question, yes, people did</p> <p>16 periodically check to -- to double-check.</p> <p>17 Q. Okay. And was that -- would that have</p> <p>18 been documented anywhere?</p> <p>19 A. What is documented already which I have</p> <p>20 read to you from the report were that the samples</p> <p>21 were incubated at 37 degrees C for up to five weeks</p> <p>22 in oxidative media composed of 0.1 M CoCl₂ and 20</p> <p>23 weight percent H₂O₂.</p> <p>24 Q. There wasn't -- it's really a simple</p> <p>25 question. I think the answer is no, but there isn't</p>	<p>1 6:27.</p> <p>2 MR. HUTCHINSON: Okay. Dan, are you</p> <p>3 there?</p> <p>4 MR. THORNBURGH: I'm here.</p> <p>5 MR. HUTCHINSON: Good.</p> <p>6 EXAMINATION</p> <p>7 BY MR. HUTCHINSON:</p> <p>8 Q. Dr. Benight, my name is Chad Hutchinson</p> <p>9 and I have the privilege of representing Ethicon and</p> <p>10 Johnson & Johnson and I want to ask you a couple</p> <p>11 questions, okay?</p> <p>12 A. Okay.</p> <p>13 Q. Okay. Where do you work?</p> <p>14 A. I work at Exponent.</p> <p>15 Q. And how long have you worked at Exponent?</p> <p>16 A. A little over a year and a half.</p> <p>17 Q. What do you do at Exponent?</p> <p>18 A. I am a senior scientist there.</p> <p>19 Q. Are you also a chemist?</p> <p>20 A. Yes.</p> <p>21 Q. Would you describe your education for the</p> <p>22 jury, please?</p> <p>23 A. I have a bachelor's of science in</p> <p>24 chemistry from Stanford University. I also have a</p> <p>25 Ph.D. in chemistry and a dual Ph.D. in</p>

Stephanie Benight, Ph.D.

Page 222	Page 224
<p>1 nanotechnology from the University of Washington.</p> <p>2 Q. What is nanotechnology?</p> <p>3 A. It's a study of various small things,</p> <p>4 essentially.</p> <p>5 Q. Were you involved in the experiment or</p> <p>6 testing that is the subject of Dr. MacLean's expert</p> <p>7 report?</p> <p>8 A. Yes.</p> <p>9 Q. Would you tell the jury what work that you</p> <p>10 did on that project?</p> <p>11 A. I helped to do experiments. I also helped</p> <p>12 to coordinate other staff, and I helped in</p> <p>13 preparation of the report. I also helped in</p> <p>14 reviewing documentation.</p> <p>15 Q. And were you working at the direction of</p> <p>16 Dr. MacLean?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. Are you proud of the work that you</p> <p>19 have done?</p> <p>20 A. Yes.</p> <p>21 MR. THORNBURGH: Objection.</p> <p>22 Argumentative.</p> <p>23 BY MR. HUTCHINSON:</p> <p>24 Q. Let's talk about lab documentation for a</p> <p>25 minute, okay?</p>	<p>1 provided in the production.</p> <p>2 Q. And were all of them given to the</p> <p>3 plaintiffs' lawyer before this deposition started?</p> <p>4 A. Yes.</p> <p>5 MR. THORNBURGH: Objection.</p> <p>6 THE WITNESS: To my knowledge, yes.</p> <p>7 BY MR. HUTCHINSON:</p> <p>8 Q. Could lab documentation be considered a</p> <p>9 lab notebook, if you will?</p> <p>10 A. Yes.</p> <p>11 MR. THORNBURGH: Objection.</p> <p>12 THE WITNESS: Yes.</p> <p>13 BY MR. HUTCHINSON:</p> <p>14 Q. Can lab documentation or lab notebooks be</p> <p>15 kept in different types of format?</p> <p>16 A. Yes.</p> <p>17 Q. Would it be acceptable for lab</p> <p>18 documentation to be in a bound or stitched --</p> <p>19 spirally bound notebook?</p> <p>20 A. Yes.</p> <p>21 Q. Alternatively, would it be acceptable for</p> <p>22 lab documentation to be in a loose-leaf, three-ring</p> <p>23 binder?</p> <p>24 A. Yes.</p> <p>25 MR. THORNBURGH: Object.</p>
Page 223	Page 225
<p>1 A. Okay.</p> <p>2 Q. As a scientist, what does lab</p> <p>3 documentation mean to you?</p> <p>4 A. It is a record of experiments performed in</p> <p>5 a laboratory.</p> <p>6 Q. Why is -- is laboratory documentation</p> <p>7 important?</p> <p>8 A. Yes.</p> <p>9 Q. Why?</p> <p>10 A. It ensures that the experiments that are</p> <p>11 performed are recorded so that another reasonable</p> <p>12 scientist can repeat the work if needed.</p> <p>13 Q. Is it the primary record of research?</p> <p>14 A. Yes.</p> <p>15 Q. Okay. And does it explain how experiments</p> <p>16 were performed?</p> <p>17 A. Yes.</p> <p>18 Q. Okay. Dr. Benight, did you keep lab</p> <p>19 documentation for the experiment that we have been</p> <p>20 here discussing today?</p> <p>21 A. Yes.</p> <p>22 Q. Has that lab documentation been given to</p> <p>23 the plaintiffs' lawyer?</p> <p>24 A. Yes. All of the laboratory documentation</p> <p>25 and records of experiments performed have been</p>	<p>1 BY MR. HUTCHINSON:</p> <p>2 Q. Alternatively, would it be acceptable for</p> <p>3 lab documentation to be in electronic format?</p> <p>4 A. Yes.</p> <p>5 MR. THORNBURGH: Objection.</p> <p>6 BY MR. HUTCHINSON:</p> <p>7 Q. And did you provide or give the</p> <p>8 plaintiffs' lawyers the lab documentation in an</p> <p>9 electronic format before today's deposition?</p> <p>10 A. Yes.</p> <p>11 Q. Dr. Benight, are there benefits to keeping</p> <p>12 lab documentation in an electronic format?</p> <p>13 A. Yes.</p> <p>14 Q. Like what?</p> <p>15 A. Oh, it is easily shared among people. You</p> <p>16 are able to store large amounts of data, and you</p> <p>17 reduce the amount of transcription errors in</p> <p>18 hand-writing notes.</p> <p>19 Q. And when we talk about storing large</p> <p>20 amounts of data, do SEMs or scanning electronic</p> <p>21 microscopy images, do they take up a large amount of</p> <p>22 electronic data?</p> <p>23 A. Generally, yes.</p> <p>24 Q. Okay. I want to talk about the lab</p> <p>25 documentation that you did for just a minute, okay?</p>

57 (Pages 222 to 225)

Stephanie Benight, Ph.D.

Page 226	Page 228
<p>1 A. Okay.</p> <p>2 Q. Did you document the microscopy work that</p> <p>3 you did by way of taking micrographs?</p> <p>4 A. Yes.</p> <p>5 Q. And did you save all of those micrographs</p> <p>6 electronically?</p> <p>7 A. Yes.</p> <p>8 Q. Have those micrographs been given to the</p> <p>9 plaintiffs' lawyer?</p> <p>10 A. Yes.</p> <p>11 Q. Does the lab documentation that has been</p> <p>12 given to the plaintiffs' lawyers before this</p> <p>13 deposition explain how this experiment was</p> <p>14 performed?</p> <p>15 A. Yes.</p> <p>16 Q. Does it --</p> <p>17 MR. THORNBURGH: Objection.</p> <p>18 BY MR. HUTCHINSON:</p> <p>19 Q. Does it include documentation of all steps</p> <p>20 taken during this experiment?</p> <p>21 MR. THORNBURGH: Objection.</p> <p>22 THE WITNESS: Yes. All of the steps in</p> <p>23 this -- these experiments were provided in the</p> <p>24 production given to you electronically.</p> <p>25</p>	<p>1 BY MR. HUTCHINSON:</p> <p>2 Q. Is traceability important?</p> <p>3 A. Yes.</p> <p>4 Q. Why?</p> <p>5 A. It ensures that the experiments that are</p> <p>6 outlined in the record of the experiments performed,</p> <p>7 were performed.</p> <p>8 Q. Okay. Does the lab documentation show</p> <p>9 traceability between the original mesh, the samples</p> <p>10 that were prepared and stained, and the results of</p> <p>11 this experiment?</p> <p>12 MR. THORNBURGH: Objection. Which sample</p> <p>13 are you talking about?</p> <p>14 BY MR. HUTCHINSON:</p> <p>15 Q. You can answer.</p> <p>16 A. All of the samples as part of this</p> <p>17 investigation were documented, and the samples that</p> <p>18 were created as a result of the work done at Histon</p> <p>19 were returned to me.</p> <p>20 Q. Dr. Benight, have you maintained and</p> <p>21 preserved all the samples from this testing?</p> <p>22 A. Yes.</p> <p>23 Q. Dr. Benight, did you follow the same</p> <p>24 procedure and use the same rigor in conducting this</p> <p>25 experiment that you would have if you would have</p>
Page 227	Page 229
<p>1 BY MR. HUTCHINSON:</p> <p>2 Q. Does -- or given to the plaintiffs?</p> <p>3 A. Given to the plaintiffs electronically.</p> <p>4 Q. Thank you. And does it include all</p> <p>5 information another scientist would need to repeat</p> <p>6 your work or Dr. MacLean's work?</p> <p>7 A. Yes.</p> <p>8 Q. Does it include all the information needed</p> <p>9 for another scientist to verify this work done by</p> <p>10 Exponent?</p> <p>11 A. Yes.</p> <p>12 MR. THORNBURGH: Objection.</p> <p>13 BY MR. HUTCHINSON:</p> <p>14 Q. Does the lab documentation that has been</p> <p>15 given to the plaintiffs' lawyer include traceable</p> <p>16 records?</p> <p>17 A. Yes.</p> <p>18 Q. And what do you mean by "traceable</p> <p>19 records"?</p> <p>20 MR. THORNBURGH: Objection.</p> <p>21 THE WITNESS: Records that show what</p> <p>22 samples were sent to Histon, where the processing,</p> <p>23 embedding, and staining of the samples happened.</p> <p>24 And record of chain of custody showing that all the</p> <p>25 samples as a result of this work was returned to me.</p>	<p>1 submitted it for publication in a peer-reviewed</p> <p>2 journal?</p> <p>3 MR. THORNBURGH: Objection.</p> <p>4 THE WITNESS: Yes.</p> <p>5 BY MR. HUTCHINSON:</p> <p>6 Q. Let's talk about the protocol for the</p> <p>7 actual experiment for a minute, okay?</p> <p>8 A. Okay.</p> <p>9 Q. Who is Dr. Iakovlev?</p> <p>10 A. He is one of the plaintiffs' experts.</p> <p>11 Q. And is that -- is Dr. Guelcher a plaintiff</p> <p>12 expert as well?</p> <p>13 A. Yes.</p> <p>14 Q. Were you trying to recreate and reproduce</p> <p>15 the testing that Drs. Iakovlev and Guelcher have</p> <p>16 done?</p> <p>17 A. We followed their protocols that they have</p> <p>18 used. For Dr. Iakovlev, the staining, and for</p> <p>19 Dr. Guelcher, the chemically oxidized protocol.</p> <p>20 Q. And when you mean you followed the</p> <p>21 protocols that they used, what do you mean by that?</p> <p>22 A. The information from their expert reports</p> <p>23 and the IUGA proceedings paper.</p> <p>24 Q. Dr. Benight, let's talk about the control</p> <p>25 experiments for a minute, okay?</p>

58 (Pages 226 to 229)

Stephanie Benight, Ph.D.

Page 230	Page 232
<p>1 A. Okay.</p> <p>2 Q. Did you perform the control experiments</p> <p>3 that neither Dr. Iakovlev nor Dr. Guelcher performed</p> <p>4 in their mesh-staining work?</p> <p>5 MR. THORNBURGH: Objection.</p> <p>6 THE WITNESS: Yes.</p> <p>7 BY MR. HUTCHINSON:</p> <p>8 Q. And what does it show?</p> <p>9 A. The results of our work showed that</p> <p>10 intentionally oxidized Prolene mesh does not stain</p> <p>11 with H&E.</p> <p>12 Q. Dr. Benight, let's talk about Histon for</p> <p>13 a minute, okay?</p> <p>14 A. Okay.</p> <p>15 Q. What is Histon Labs?</p> <p>16 A. It is a histopathology lab in Everett,</p> <p>17 Washington.</p> <p>18 Q. And what does "histopathology" mean?</p> <p>19 A. It's the -- includes the study of staining</p> <p>20 tissue with different stains.</p> <p>21 Q. And does Histon Labs have a specialty or</p> <p>22 area of expertise?</p> <p>23 A. They have an impeccable reputation for</p> <p>24 staining and processing slides and tissue.</p> <p>25 Q. And Dr. Benight, when you say they have</p>	<p>1 about whether or not you followed a written protocol</p> <p>2 for the QUV oxidation.</p> <p>3 Do you remember that line of questioning?</p> <p>4 A. Yes.</p> <p>5 Q. Did you need to have a written protocol?</p> <p>6 A. No, it's not necessary.</p> <p>7 Q. Why not?</p> <p>8 A. It's important that you record the</p> <p>9 experiments that you perform.</p> <p>10 Q. And why would you not need a written</p> <p>11 protocol?</p> <p>12 A. Well, we followed a protocol given in</p> <p>13 hundreds of literature papers where it's</p> <p>14 demonstrated that QUV is a way to induce changes in</p> <p>15 polymer samples including oxidation, and we followed</p> <p>16 a specific irradiance in temperature given in</p> <p>17 Dr. Reitman, et al., a conference presentation.</p> <p>18 Q. Dr. Benight, to your knowledge, would</p> <p>19 Dr. Iakovlev or Dr. Guelcher have access to the</p> <p>20 written protocol for QUV oxidation?</p> <p>21 A. Yes.</p> <p>22 Q. How so?</p> <p>23 A. Well, the hundreds of literature papers</p> <p>24 are -- I'm sure some of them are publicly available</p> <p>25 to them, and -- but mainly, the procedures that were</p>
Page 231	Page 233
<p>1 "an impeccable reputation," how do you know that?</p> <p>2 MR. THORNBURGH: Objection.</p> <p>3 THE WITNESS: Colleagues of mine at</p> <p>4 Exponent have told me and Exponent has used them for</p> <p>5 years.</p> <p>6 BY MR. HUTCHINSON:</p> <p>7 Q. Did Histon --</p> <p>8 MR. THORNBURGH: Objection.</p> <p>9 BY MR. HUTCHINSON:</p> <p>10 Q. -- Labs follow its internal quality</p> <p>11 control procedures when it performed the sample</p> <p>12 preparation?</p> <p>13 A. Yes.</p> <p>14 Q. Would that include embedding the samples</p> <p>15 in either paraffin or resin?</p> <p>16 MR. THORNBURGH: Objection.</p> <p>17 THE WITNESS: Yes.</p> <p>18 BY MR. HUTCHINSON:</p> <p>19 Q. Would that include either microtoming or</p> <p>20 cutting the samples?</p> <p>21 A. Yes.</p> <p>22 Q. Would that include staining or attempting</p> <p>23 to stain the samples?</p> <p>24 A. Yes.</p> <p>25 Q. Dr. Benight, you were asked questions</p>	<p>1 followed are documented in Dr. MacLean's expert</p> <p>2 report.</p> <p>3 Q. Would you consider it a simple procedure?</p> <p>4 A. Yes.</p> <p>5 MR. THORNBURGH: Objection.</p> <p>6 BY MR. HUTCHINSON:</p> <p>7 Q. And why is that?</p> <p>8 A. It requires a few steps and it's easy to</p> <p>9 follow.</p> <p>10 Q. Do you have Exhibit 1 in front of you?</p> <p>11 A. Yes.</p> <p>12 Q. Would you tell the jury what Exhibit 1 is,</p> <p>13 please?</p> <p>14 A. Exhibit 1 is a microscopy image index.</p> <p>15 Q. And was this document created</p> <p>16 contemporaneously or at the same time with these</p> <p>17 experiments?</p> <p>18 A. This document was created after the</p> <p>19 experiments were performed.</p> <p>20 Q. All right. And why was it not created</p> <p>21 contemporaneously with the experiments?</p> <p>22 A. This document was created at the request</p> <p>23 of Dr. MacLean for his ease of reference during his</p> <p>24 deposition.</p> <p>25 Q. And would that microscopy image index need</p>

Stephanie Benight, Ph.D.

Page 234	Page 236
<p>1 to be created contemporaneously with the</p> <p>2 experiments?</p> <p>3 A. No.</p> <p>4 Q. Why not?</p> <p>5 A. It's an index which is usually created</p> <p>6 after all of the items to be included in the index</p> <p>7 are completed.</p> <p>8 Q. Dr. MacLean -- I'm sorry -- strike that.</p> <p>9 Dr. Benight, do you have Exhibit No. 8 in</p> <p>10 front of you, it's one of the flash drives.</p> <p>11 A. Oh, yes.</p> <p>12 Q. And would you identify that exhibit for</p> <p>13 us, please?</p> <p>14 A. Exhibit 8 is a flash drive provided --</p> <p>15 brought with me here to the deposition, and the</p> <p>16 contents on Exhibit 8 include the TVM consolidated</p> <p>17 case doc, my Duces Tecum or notice of deposition, a</p> <p>18 document entitled "H15-118 Sample Chain of Custody</p> <p>19 Form," which I believe is also produced as a paper</p> <p>20 exhibit already.</p> <p>21 And a folder labeled "QUV," which includes</p> <p>22 optical microscopy and SEM images, a folder labeled</p> <p>23 2015-08-14_COCL2mesh_twoweeks, which contains SEM</p> <p>24 images labeled "oxidized mesh," and it also contains</p> <p>25 a protocol document which is a calculation based on</p>	<p>1 based on the chemical bonds that are present in that</p> <p>2 material.</p> <p>3 Q. And Dr. Benight, you testified earlier</p> <p>4 about a repeat FTIR. Do you remember that</p> <p>5 testimony?</p> <p>6 A. Yes.</p> <p>7 Q. Would you tell the jury what a repeat FTIR</p> <p>8 is and why it was done?</p> <p>9 A. It's just a second time of doing an FTIR</p> <p>10 experiment. It was done in this case so that a</p> <p>11 background spectrum could be saved along with the</p> <p>12 spectrum of the sample that was analyzed, and we</p> <p>13 found in the repeat FTIR that we did that the</p> <p>14 spectrum of the sample analyzed was quite similar to</p> <p>15 samples that were analyzed previously as part of the</p> <p>16 first FTIR.</p> <p>17 Q. Why would a background spectrum need to be</p> <p>18 saved?</p> <p>19 A. Elements such as the air can show up in</p> <p>20 FTIR and you want to ensure that you are only</p> <p>21 detecting chemical bonds that are present in your</p> <p>22 sample being analyzed.</p> <p>23 Q. Dr. Benight, you were asked questions</p> <p>24 earlier by the plaintiffs' lawyer about the</p> <p>25 scientific method.</p>
Page 235	Page 237
<p>1 the information given in the IUGA proceedings paper</p> <p>2 authored by Dr. Scott Guelcher.</p> <p>3 Q. And the chain of custody documents that</p> <p>4 you just mentioned, when did you receive it?</p> <p>5 A. Yesterday.</p> <p>6 Q. And is that what is on Exhibit 8?</p> <p>7 A. Yes. This is electronically given on</p> <p>8 Exhibit 8.</p> <p>9 Q. And yesterday, would that be October 12th?</p> <p>10 A. Yes.</p> <p>11 Q. Is that -- would that be after Dr. Steve</p> <p>12 MacLean's deposition?</p> <p>13 A. Yes.</p> <p>14 Q. Dr. Benight, why wasn't the information on</p> <p>15 Exhibit 8, the flash drive, provided with</p> <p>16 Dr. MacLean's production?</p> <p>17 A. It wasn't included in his report and it --</p> <p>18 I believe it wasn't in his file.</p> <p>19 Q. Dr. Benight, let's talk about FTIRs for a</p> <p>20 minute, okay?</p> <p>21 A. Okay.</p> <p>22 Q. What does "FTIR" stand for?</p> <p>23 A. Fourier Transform Infrared Spectroscopy.</p> <p>24 Q. And to a layperson, what does FTIR do?</p> <p>25 A. It is a way to identify what a material is</p>	<p>1 Do you remember that line of questioning?</p> <p>2 Maybe?</p> <p>3 A. Maybe, yeah.</p> <p>4 Q. It's been a long day?</p> <p>5 A. Yes.</p> <p>6 Q. Okay. How many hours have you been</p> <p>7 deposited?</p> <p>8 A. We started at around 11:40.</p> <p>9 Q. And what time is it now?</p> <p>10 A. 6:45.</p> <p>11 Q. All right.</p> <p>12 Dr. Benight, did you follow the scientific</p> <p>13 method when doing this experiment?</p> <p>14 MR. THORNBURGH: Objection.</p> <p>15 THE WITNESS: Yes, we --</p> <p>16 BY MR. HUTCHINSON:</p> <p>17 Q. How so?</p> <p>18 A. -- we had a hypothesis and then we tested</p> <p>19 it by performing experiments.</p> <p>20 Q. What is a "hypothesis"?</p> <p>21 A. It is a theory or I guess a theory of what</p> <p>22 you believe will -- will be the outcome of the</p> <p>23 experiments.</p> <p>24 Q. Dr. Benight, you were asked questions</p> <p>25 about doing a statistical analysis as part of your</p>

Stephanie Benight, Ph.D.

Page 238	Page 240
<p>1 investigation.</p> <p>2 Do you remember those lines -- that line</p> <p>3 of questioning?</p> <p>4 A. Yes.</p> <p>5 Q. Did you do a statistical analysis for this</p> <p>6 experiment?</p> <p>7 A. No.</p> <p>8 Q. Why not?</p> <p>9 A. The sets of experiments were control</p> <p>10 experiments done to investigate whether</p> <p>11 intentionally oxidized Prolene mesh stains with H&E.</p> <p>12 It wasn't a statistical analysis.</p> <p>13 Q. And tell the jury what a control</p> <p>14 experiment is, please?</p> <p>15 A. It is a -- it's an experiment done to</p> <p>16 essentially show what you expect to happen from that</p> <p>17 experiment, is what you find.</p> <p>18 Q. And while we are talking about statistical</p> <p>19 analyses, do you know if Dr. Iakovlev conducted a</p> <p>20 statistical analysis?</p> <p>21 A. I haven't seen a record of any statistical</p> <p>22 analysis that Dr. Iakovlev would have performed.</p> <p>23 Q. Have you seen --</p> <p>24 MR. THORNBURGH: Objection.</p> <p>25</p>	<p>1 and characteristics to the samples of the batch that</p> <p>2 were all processed in a similar manner.</p> <p>3 Q. Dr. Benight, do you need to have scanning</p> <p>4 electron microscopy of Sample No. 2?</p> <p>5 A. It's not needed, no.</p> <p>6 Q. Okay. Why not? Why is it not needed?</p> <p>7 A. Because scanning electron microscopy</p> <p>8 images of samples that were processed in the same</p> <p>9 way, in the same amount of time, with the same</p> <p>10 process were already recorded.</p> <p>11 Q. Along those lines Dr. Benight, would you</p> <p>12 need to do an FTIR analysis on Sample No. 2?</p> <p>13 A. No --</p> <p>14 MR. THORNBURGH: Objection.</p> <p>15 BY MR. HUTCHINSON:</p> <p>16 Q. Why not?</p> <p>17 A. We performed FTIR on samples that were</p> <p>18 processed in the similar manner, at the same time,</p> <p>19 under the same conditions. And so it's -- it wasn't</p> <p>20 necessary to do an FTIR on every individual sample.</p> <p>21 Q. Dr. Benight, you were asked questions</p> <p>22 about Sample Nos. 1 through 6 and what was sent to</p> <p>23 Histion.</p> <p>24 Do you remember that line of questioning</p> <p>25 by the plaintiffs' lawyer?</p>
Page 239	Page 241
<p>1 BY MR. HUTCHINSON:</p> <p>2 Q. Have you seen a record or do you know if</p> <p>3 Dr. Guelcher conducted a statistical analysis?</p> <p>4 MR. THORNBURGH: Objection.</p> <p>5 THE WITNESS: I haven't seen a record of</p> <p>6 any statistical analysis that Dr. Guelcher may have</p> <p>7 performed.</p> <p>8 BY MR. HUTCHINSON:</p> <p>9 Q. Do you know -- strike that.</p> <p>10 Dr. Benight, you were asked questions</p> <p>11 about whether you had scanning electron microscopy</p> <p>12 on various samples.</p> <p>13 Do you remember that line of questioning?</p> <p>14 A. Yes.</p> <p>15 Q. Do you need to have scanning electron</p> <p>16 microscopy of all samples?</p> <p>17 A. No.</p> <p>18 Q. Why not?</p> <p>19 A. We acquired scanning electron microscopy</p> <p>20 on a few of the samples processed in a similar</p> <p>21 manner, and we chose a representative sample from</p> <p>22 that batch for the experiments outlined in</p> <p>23 Dr. MacLean's report.</p> <p>24 Q. What does a "representative sample" mean?</p> <p>25 A. It is a sample that shows similar features</p>	<p>1 A. Yes.</p> <p>2 Q. What would you tell a jury about the</p> <p>3 traceability of those samples?</p> <p>4 A. I received a chain of custody form from</p> <p>5 Histion of all of the samples that are part of this</p> <p>6 investigation, including those that were processed</p> <p>7 and embedded and stained according to Dr. Iakovlev's</p> <p>8 protocol. And also, those that were sent but not</p> <p>9 processed as part of this study.</p> <p>10 Q. Anything else?</p> <p>11 MR. THORNBURGH: Objection. Doesn't</p> <p>12 answer the question, and mischaracterizes the</p> <p>13 evidence.</p> <p>14 BY MR. HUTCHINSON:</p> <p>15 Q. Dr. Benight, let me ask you this. What is</p> <p>16 a chain of custody form?</p> <p>17 A. It is a record of possession of samples.</p> <p>18 Q. And have you produced all chain of custody</p> <p>19 forms to the plaintiffs' lawyer?</p> <p>20 A. Yes.</p> <p>21 Q. Okay. Dr. Benight --</p> <p>22 MR. HUTCHINSON: We're having technical</p> <p>23 problems here.</p> <p>24 (Whereupon, a brief discussion off the</p> <p>25 record.)</p>

Stephanie Benight, Ph.D.

Page 242	Page 244
<p>1 BY MR. HUTCHINSON:</p> <p>2 Q. Dr. Benight, what did you bring with you</p> <p>3 to today's deposition?</p> <p>4 A. I brought my notice of deposition, the</p> <p>5 chain of custody form that I received yesterday from</p> <p>6 the lab, three jump drives or -- or flash drives</p> <p>7 labeled Exhibits 6, 7, and 8, and two blue boxes</p> <p>8 that include slides and samples from the study</p> <p>9 performed.</p> <p>10 Q. Let's talk about -- let's talk about the</p> <p>11 blue -- would you hold it up and show the jury,</p> <p>12 please?</p> <p>13 A. Yes.</p> <p>14 Q. And maybe turn it?</p> <p>15 A. This is the -- one of the blue boxes and</p> <p>16 in --</p> <p>17 Q. If you could open it without everything</p> <p>18 falling out --</p> <p>19 A. I'll try.</p> <p>20 Q. Very carefully.</p> <p>21 A. Inside -- I'll tilt it, and inside there</p> <p>22 are resin and paraffin blocks. So the samples that</p> <p>23 were sent that we processed at Exponent were sent to</p> <p>24 the lab and they embedded them in either a resin or</p> <p>25 paraffin.</p>	<p>1 A. Yes. So here is slide number 15-118-4A,</p> <p>2 and you can see that there are four individual</p> <p>3 sections of slices of paraffin, and if you look very</p> <p>4 closely, there is sections of mesh sort of in the</p> <p>5 center of each of those very thin slices and</p> <p>6 sections.</p> <p>7 Q. And Dr. Benight, is there a number on that</p> <p>8 particular slide?</p> <p>9 A. Yes, this is 15-118-4A, which indicates to</p> <p>10 me that this was -- underwent the chemically</p> <p>11 oxidizing protocol, and is embedded in a paraffin</p> <p>12 wax.</p> <p>13 Q. And Dr. Benight, on the -- your left side</p> <p>14 of the box, I see various things in bags; is that</p> <p>15 correct?</p> <p>16 A. Yes.</p> <p>17 Q. Okay. Would you identify for the jury</p> <p>18 what are in the bags, please?</p> <p>19 A. Yes. These are part of the original</p> <p>20 packaging that was sent to the lab --</p> <p>21 Q. And what do you mean by "packaging"?</p> <p>22 A. These samples are in a -- wrapped in foil</p> <p>23 and then in a plastic bag which has a label on it.</p> <p>24 So for example, this one says that it's</p> <p>25 "UV oxidized" and you can see that it's -- there was</p>
Page 243	Page 245
<p>1 And as an example, this is a paraffin</p> <p>2 block, so you can see wax inside of it. And if we</p> <p>3 look at a resin block, that looks more like this,</p> <p>4 where it is a different type of polymer that the --</p> <p>5 the mesh sample is embedded in.</p> <p>6 And if you look very closely, it's --</p> <p>7 there, you can see blue fibers in this particular</p> <p>8 one that I'm -- that I'm holding up, which is sample</p> <p>9 1B, and -- which is pristine Prolene mesh.</p> <p>10 And so once the samples are processed and</p> <p>11 embedded in those polymer blocks, then they are cut</p> <p>12 into very thin slices.</p> <p>13 Q. And Dr. Benight, do you have any of those</p> <p>14 thin slices with you today?</p> <p>15 A. Yes. Those are the slides in the boxes</p> <p>16 that are above what I'm pointing out here, and there</p> <p>17 is also --</p> <p>18 Q. Excuse me.</p> <p>19 A. -- additional slides in the second box.</p> <p>20 Q. And Dr. Benight, in the box that you are</p> <p>21 holding up, would you show the jury one of the</p> <p>22 slides that you are talking about?</p> <p>23 A. Sure. So --</p> <p>24 Q. And if you could identify it for the jury,</p> <p>25 please?</p>	<p>1 a slide with some yellow tape where the mesh that</p> <p>2 was processed by Histon was when it was shipped</p> <p>3 from Exponent to Histon.</p> <p>4 Q. And Dr. Benight, while you have that</p> <p>5 showing it to the jury, is there a number on the</p> <p>6 backside or on the front side, rather?</p> <p>7 A. Yeah, it's --</p> <p>8 Q. And what does that number mean?</p> <p>9 A. Well, the number H15-118-2, is --</p> <p>10 indicates that it's Sample No. 2.</p> <p>11 Q. Okay. And what does that tell us about</p> <p>12 traceability?</p> <p>13 A. That it's been documented.</p> <p>14 MR. THORNBURGH: Objection.</p> <p>15 THE WITNESS: And since the samples were</p> <p>16 returned to me, then in the -- they are documented</p> <p>17 in the chain of custody record and they were</p> <p>18 originally sent from Exponent to Histon and then</p> <p>19 sent back to me.</p> <p>20 BY MR. HUTCHINSON:</p> <p>21 Q. Dr. Benight --</p> <p>22 MR. THORNBURGH: Objection.</p> <p>23 BY MR. HUTCHINSON:</p> <p>24 Q. Are there other bags in the what I would</p> <p>25 call the big blue box that you brought with you</p>

Stephanie Benight, Ph.D.

Page 246	Page 248
<p>1 today?</p> <p>2 A. Yes. There are --</p> <p>3 Q. What do they show?</p> <p>4 A. There are additional samples that were</p> <p>5 sent. We have samples in aluminum foil -- where</p> <p>6 there is a tiny mesh sample contained in there and I</p> <p>7 can open it for you if you would like, but it's</p> <p>8 contained inside this aluminum foil. And then this</p> <p>9 is inside a plastic bag which has a label on it for</p> <p>10 oxidized mesh.</p> <p>11 So this is chemically oxidized mesh and it</p> <p>12 says "backup only." We wanted to sort of cover our</p> <p>13 basis, if you will, so we sent more than one sample</p> <p>14 in case the lab needed it for their work.</p> <p>15 Q. And do you have any other bags on that</p> <p>16 side of the box?</p> <p>17 A. There's two. The one I was holding up,</p> <p>18 there are two that are similar, is labeled</p> <p>19 H15-115-3A, and then also H15-115-3B, and there are</p> <p>20 a few other bags including "COCl₂ oxidized mesh,"</p> <p>21 labeled, one for paraffin and one for resin.</p> <p>22 And the one for paraffin is labeled</p> <p>23 H15-118-4A, and the second one for resin is labeled</p> <p>24 H15-118-4B. And currently, if we look closer, there</p> <p>25 is no mesh in the bag.</p>	<p>1 A. It was processed as part of the work that</p> <p>2 is covered in Dr. MacLean's report.</p> <p>3 Q. Okay. Is that all of the bags that are in</p> <p>4 that box?</p> <p>5 A. There is one more.</p> <p>6 Q. And what does it show?</p> <p>7 A. It has a slide with mesh.</p> <p>8 Q. And does it have some writing on the</p> <p>9 outside?</p> <p>10 A. Yes, it says.</p> <p>11 Q. What does the writing say?</p> <p>12 A. 15-118-6.</p> <p>13 Q. And what does that mean?</p> <p>14 A. That means that it's part of the study and</p> <p>15 it also says "QUV mesh" on it.</p> <p>16 Q. Okay. And what does "QUV mesh" mean?</p> <p>17 A. That means that the mesh was exposed to a</p> <p>18 QUV irradiation for five days at 60 degrees at an</p> <p>19 irradiance of .98 watts per meter squared.</p> <p>20 Q. What is in that bag?</p> <p>21 A. Inside here we have a slide wrapped in</p> <p>22 aluminum foil, and if I'm unwrapping the aluminum</p> <p>23 foil, we see that there is a glass slide and then</p> <p>24 also a mesh sample -- I'll try not to drop it --</p> <p>25 there is a mesh sample that has not been embedded in</p>
Page 247	Page 249
<p>1 Q. Excuse me. Why would there not be any</p> <p>2 mesh in the bag?</p> <p>3 A. The mesh that was in here when we sent it</p> <p>4 was processed as part of the work that we have been</p> <p>5 discussing and is the basis for Dr. MacLean's</p> <p>6 report.</p> <p>7 So there is no mesh because all of it was</p> <p>8 embedded, and since this says 4A, it was embedded in</p> <p>9 paraffin.</p> <p>10 Q. Okay. Have we discussed all the bags?</p> <p>11 A. There is -- there is an additional bag</p> <p>12 that is labeled "Exemplar."</p> <p>13 Q. And what is -- what does "exemplar" mean</p> <p>14 here?</p> <p>15 A. It's out of the box pristine Prolene.</p> <p>16 Q. Does that mean it's never been before used</p> <p>17 in the body?</p> <p>18 A. Yes.</p> <p>19 Q. Okay.</p> <p>20 A. Or intentionally oxidized. So this --</p> <p>21 Q. What does that bag show us right there?</p> <p>22 A. It's labeled "Exemplar" and labeled</p> <p>23 H15-118-1, and if we look closely there is also no</p> <p>24 mesh in this bag because.</p> <p>25 Q. And why not?</p>	<p>1 paraffin or resin-embedding media.</p> <p>2 Q. And Dr. Benight, are these the type of</p> <p>3 procedures that you as a scientist use to document</p> <p>4 your work?</p> <p>5 A. The procedures -- this -- all of this is</p> <p>6 covered in the chain of custody documents, sir.</p> <p>7 Q. Is this the type of work that you normally</p> <p>8 do?</p> <p>9 A. We do keep track of samples that are sent,</p> <p>10 yes.</p> <p>11 Q. Okay. And there is a second box that you</p> <p>12 have brought with you today; is that correct?</p> <p>13 A. Yes.</p> <p>14 Q. And would you show the jury what is in the</p> <p>15 second box?</p> <p>16 A. Sure. So the second box is smaller and</p> <p>17 it's also a blue box, and inside this box -- see if</p> <p>18 I can open it -- there is additional microscope</p> <p>19 slides that were -- that were created as part of</p> <p>20 this study. And we have them -- like here is an</p> <p>21 example --</p> <p>22 Q. What does it -- and what does it say?</p> <p>23 A. This slide is labeled H15-118-1B, and</p> <p>24 it -- it's exemplar mesh stained with H&E or gone</p> <p>25 through the staining protocol.</p>

63 (Pages 246 to 249)

Stephanie Benight, Ph.D.

Page 250	Page 252
<p>1 Q. Okay. Dr. Benight, were these two blue 2 boxes of slides available for Dr. Thornburgh -- I'm 3 sorry, for Mr. Thornburgh's review today? 4 A. Yes, they are available here at the 5 deposition. 6 Q. Okay. Dr. Benight, I want to ask you -- 7 MR. THORNBURGH: Objection. 8 BY MR. HUTCHINSON: 9 Q. -- another question. 10 A. Okay. 11 Q. Or another line of questioning, rather. 12 You were asked some questions earlier 13 about who at Exponent divided Sample No. 6 and the 14 documentation for that. 15 Do you remember that line of questioning? 16 A. Yes. 17 Q. Dr. Benight, is it an internal Exponent 18 policy and procedure to document who cuts a sample 19 with the razor blade? 20 A. No. 21 Q. Why not? 22 A. It really doesn't matter. 23 MR. THORNBURGH: Objection. 24 BY MR. HUTCHINSON: 25 Q. Was the mesh indeed cut with a razor</p>	<p>1 questions. Thank you for your time. 2 A. You are welcome. 3 MR. HUTCHINSON: Dan, do you have any 4 further questions or are we done? Do you need to 5 take a break? 6 MR. THORNBURGH: I have very few 7 additional questions. 8 MR. HUTCHINSON: Okay. 9 THE WITNESS: I would like to take a 10 break. 11 MR. HUTCHINSON: Okay. That's fine. 12 That's fine. We'll take a quick break. 13 THE VIDEOGRAPHER: Going off the record at 14 7:05. 15 (Whereupon, a brief recess was taken.) 16 THE VIDEOGRAPHER: Back on the record at 17 7:08. 18 EXAMINATION 19 BY MR. THORNBURGH: 20 Q. Dr. Benight, do you recall questions that 21 defense counsel asked you regarding the scientific 22 method that you performed and/or followed in this 23 case? 24 A. Yes. 25 Q. And do you recall that you were asked some</p>
Page 251	Page 253
<p>1 blade? 2 A. To my knowledge, yes. 3 Q. And is the name of the person who cuts the 4 sample with the razor blade information that would 5 be necessary for a scientist to repeat the 6 experiment? 7 A. No. 8 Q. Okay. Dr. Benight, you were asked 9 questions about internal documents for the operating 10 of the QUV chamber. 11 Do you remember that line of questioning? 12 A. Yes. 13 Q. Is Exponent required to document the name 14 of the person who makes the settings on the QUV 15 machine? 16 A. No. 17 Q. Why not? 18 A. It's -- it's not important who does it. 19 Q. Is the name of that person important for 20 another scientist to replicate this experiment? 21 A. No. The conditions that the experiment 22 were performed at are relevant for another scientist 23 to repeat the experiment. 24 Q. Dr. Benight -- excuse me. 25 Dr. Benight, I don't have any further</p>	<p>1 questions about the control experiment? 2 A. Yes. 3 Q. And you were asked some questions about 4 the lack of statistical analysis that was conducted 5 in this case? 6 A. I was asked about statistical analysis 7 related to this project or investigative work that 8 we performed, and also, whether any statistical 9 analysis was performed by plaintiffs' experts 10 Dr. Guelcher and Dr. Iakovlev. 11 Q. Okay. So my question really quick is, and 12 I'm just going to summarize really quick to try to 13 expedite this process, but only one sample was 14 submitted to -- was processed by Histion for their 15 histopathology slides, correct? 16 A. Well, we -- 17 Q. I'm sorry -- 18 A. I'm sorry, I didn't finish my question. 19 Q. I'll withdraw the question. Let me 20 withdraw the question and ask it a better way. 21 A. Okay. 22 Q. Regarding the QUV-treated samples, only 23 one sample was processed into histopathology slides 24 by Histion, correct? 25 A. We sent a few QUV samples, but one was</p>

Stephanie Benight, Ph.D.

Page 254	Page 256
<p>1 sent and processed to create several different</p> <p>2 slides.</p> <p>3 Q. Okay.</p> <p>4 A. And there is also a residual resin and</p> <p>5 paraffin block from which tens or possibly hundreds</p> <p>6 of additional sections could be processed.</p> <p>7 Q. Okay. But only one sample was actually</p> <p>8 processed into histopathology slides from the</p> <p>9 QUV-treated samples, right?</p> <p>10 A. Yes. One sample was, yes.</p> <p>11 Q. Okay. And -- and how do you know that the</p> <p>12 outcome or the observations that you made didn't</p> <p>13 occur as a result of chance?</p> <p>14 A. We processed several samples within a</p> <p>15 batch and multiple samples within that batch that</p> <p>16 were processed under the same condition, the same</p> <p>17 time, the same temperature, or in the case of the</p> <p>18 chemically oxidized protocol the same solution, more</p> <p>19 than one sample was either characterized with SEM</p> <p>20 and/or FTIR to show that each of the samples had</p> <p>21 been processed similarly. And so we chose to send</p> <p>22 one representative sample from those batches for</p> <p>23 processing at Histon.</p> <p>24 Q. And only one representative sample from</p> <p>25 the QUV-treated experiment was processed by Histon,</p>	<p>1 performed the chemically oxidized protocol outlined</p> <p>2 in that paper for those samples. And for the QUV</p> <p>3 samples, you know, QUV irradiation is a common way</p> <p>4 to induce changes in polymers including oxidation,</p> <p>5 and is present in hundreds of literature papers.</p> <p>6 So in a fundamental sense, we followed</p> <p>7 that protocol. Furthermore, we followed a protocol</p> <p>8 outlined by Reitman, et al., in a conference</p> <p>9 presentation for specific conditions followed.</p> <p>10 Q. Okay. But for the staining of the mesh,</p> <p>11 the way the mesh was stained, did you follow</p> <p>12 Dr. Iakovlev's staining protocol or the protocol</p> <p>13 that was discussed in his peer-reviewed publication?</p> <p>14 A. I believe the protocol was given as an</p> <p>15 exhibit in one of his trial testimonies and that is</p> <p>16 the protocol that we instructed the lab to follow as</p> <p>17 closely as possible.</p> <p>18 Q. And it would have been important for you</p> <p>19 to follow Dr. Iakovlev's protocol, correct?</p> <p>20 A. The staining protocol, correct.</p> <p>21 Q. You didn't actually follow or instruct</p> <p>22 Histon to follow the staining protocol that is</p> <p>23 published by Dr. Iakovlev --</p> <p>24 (Whereupon, technical difficulties.)</p> <p>25 THE WITNESS: We just lost him. There is</p>
Page 255	Page 257
<p>1 right?</p> <p>2 A. Well, we sent a few but one of those</p> <p>3 samples that was processed was sent to Histon to</p> <p>4 create several different sections or slides.</p> <p>5 Q. Would you agree with me that if you would</p> <p>6 have sent three or four or five samples to Histon</p> <p>7 for the Histon staining, that that would have</p> <p>8 increased the reliability of your study?</p> <p>9 In other words, it would have helped you</p> <p>10 demonstrate that the results you got from the one</p> <p>11 sample didn't occur as a result of chance?</p> <p>12 A. Sir, we produced several different</p> <p>13 sections that were run through the staining</p> <p>14 protocol, and they showed similar results.</p> <p>15 Q. From the same sample, right?</p> <p>16 A. Well, from a section of the sample that</p> <p>17 was cut and processed as the other cut samples from</p> <p>18 the same TVT mesh product, yes.</p> <p>19 Q. You also testified earlier, I think, that</p> <p>20 you followed the protocol performed by Dr. Iakovlev</p> <p>21 in his peer-reviewed publications for the staining</p> <p>22 of the -- that single QUV sample, correct?</p> <p>23 A. No. That's incorrect, sir.</p> <p>24 We performed the protocol outlined in the</p> <p>25 IUGA proceedings authored by Dr. Guelcher. We</p>	<p>1 nothing on the phone screen.</p> <p>2 MR. HUTCHINSON: There is nothing on the</p> <p>3 what?</p> <p>4 THE WITNESS: The phone screen.</p> <p>5 THE VIDEOGRAPHER: It's dead?</p> <p>6 THE WITNESS: Yeah, just completely died.</p> <p>7 MR. HUTCHINSON: Well, that's fine. We'll</p> <p>8 wait a little bit to see if Mr. Thornburgh calls</p> <p>9 back and give me an opportunity to see if he wants</p> <p>10 to continue questioning Dr. Benight.</p> <p>11 So I will call him on my cell phone and</p> <p>12 send him an e-mail in an attempt to get in touch</p> <p>13 with him at 7:15 p.m.</p> <p>14 So why don't we go off the record until we</p> <p>15 get Mr. Thornburgh on the line.</p> <p>16 THE VIDEOGRAPHER: Off the record at 7:16.</p> <p>17 (Whereupon, a brief recess was taken.)</p> <p>18 THE VIDEOGRAPHER: Okay. We are back on</p> <p>19 the record at 7:22.</p> <p>20 MR. HUTCHINSON: Dan, we're back on the</p> <p>21 record and ready to go.</p> <p>22 BY MR. THORNBURGH:</p> <p>23 Q. Dr. Benight, did you read Dr. Iakovlev's</p> <p>24 papers concerning the degradation of the</p> <p>25 polypropylene mesh explant?</p>

65 (Pages 254 to 257)

Stephanie Benight, Ph.D.

Page 258	Page 260
<p>1 A. I may have read it previously but not</p> <p>2 recently.</p> <p>3 Q. Okay. In -- on page 21 of Exhibit</p> <p>4 Number 25?</p> <p>5 A. Okay.</p> <p>6 Q. You see where it says the,</p> <p>7 "Paraffin-embedded samples were stained using an</p> <p>8 automated stainer programmed with the following</p> <p>9 protocol."</p> <p>10 Do you see that?</p> <p>11 A. Yes.</p> <p>12 Q. Okay. Do you know what type of stainer</p> <p>13 Dr. Iakovlev used in his studies?</p> <p>14 A. We followed the protocol, stain protocol,</p> <p>15 that Dr. Iakovlev used. I believe the exhibits were</p> <p>16 from some of his trial testimony and had the</p> <p>17 heading, "St. Michael's histology protocol" on them.</p> <p>18 Q. And you did that because it would have</p> <p>19 been important to follow the protocol that</p> <p>20 Dr. Iakovlev followed, correct?</p> <p>21 A. As part of our experiments we wanted to</p> <p>22 follow Dr. Iakovlev's protocol as closely as</p> <p>23 possible.</p> <p>24 Q. And did you use a vertical or a horizontal</p> <p>25 tray?</p>	<p>1 how Dr. MacLean described horizontal or vertical. I</p> <p>2 have not seen his deposition testimony. But from</p> <p>3 what I saw, when I was at the lab, and Dr. MacLean</p> <p>4 was also present via videoconference, but what I saw</p> <p>5 was that the slides were mounted so that the</p> <p>6 thickness of the slide was inserted in a holder and</p> <p>7 then those slides were immersed in each of those</p> <p>8 solutions and taken through the protocol outlined on</p> <p>9 page 21 of Exhibit 25 as specified for the different</p> <p>10 incubation times and steps which is in line and</p> <p>11 followed from Dr. Iakovlev's protocol from his</p> <p>12 previous trial testimony.</p> <p>13 (Reporter clarification.)</p> <p>14 MR. HUTCHINSON: Dan, I'm sorry, but the</p> <p>15 court reporter is saying that she cannot hear you.</p> <p>16 So you are still breaking up on us. Could you move</p> <p>17 closer to the phone or maybe move your cell phone</p> <p>18 away from it, please.</p> <p>19 MR. THORNBURGH: I'm on the phone. I'm</p> <p>20 here. I'm speaking loud and clear. Hopefully you</p> <p>21 can hear me loud and clear.</p> <p>22 THE WITNESS: That's better.</p> <p>23 BY MR. THORNBURGH:</p> <p>24 Q. I just have a few more questions.</p> <p>25 You testified that as it related to the</p>
Page 259	Page 261
<p>1 A. I'm sorry, can you repeat the question,</p> <p>2 please?</p> <p>3 MR. HUTCHINSON: Dan, you are actually</p> <p>4 breaking up a little bit. Maybe if you could move</p> <p>5 closer to the phone that would help.</p> <p>6 BY MR. THORNBURGH:</p> <p>7 Q. Did you use a vertical or a horizontal</p> <p>8 tray when the staining process occurred?</p> <p>9 A. The samples were mounted in a tray and</p> <p>10 then immersed in each of the reservoirs that</p> <p>11 contained these different solutions.</p> <p>12 Q. Horizontal or vertical tray?</p> <p>13 A. I believe that the slides were mounted on</p> <p>14 there horizontally. So that they were -- they were</p> <p>15 sort of in -- I guess you could call it like a</p> <p>16 holder where the thin part of the slide was mounted</p> <p>17 and then submerged in the solution.</p> <p>18 Q. Dr. MacLean testified that it was on a</p> <p>19 vertical tray.</p> <p>20 A. Okay.</p> <p>21 Q. Do you know if it was vertical or</p> <p>22 horizontal, and if you don't know, what document</p> <p>23 would verify or confirm for us whether it was</p> <p>24 horizontal or vertical?</p> <p>25 A. Well, from what I described, I don't know</p>	<p>1 QUV Sample No. 2 that was processed by Histon, that</p> <p>2 scanning electron microscopy and FTIR was not</p> <p>3 performed on that sample, correct?</p> <p>4 A. Excuse me.</p> <p>5 SEM and FTIR were performed on QUV-exposed</p> <p>6 samples that were treated in the same way during the</p> <p>7 same amount of time and the same temperature and</p> <p>8 irradiance as the Sample No. 2 that you are</p> <p>9 referring to.</p> <p>10 Q. Okay. Now, you could have analyzed Sample</p> <p>11 No. 2 using SEM and FTIR before sending it to</p> <p>12 Histon, correct?</p> <p>13 A. That is one option, sir.</p> <p>14 Q. And that's an option that wasn't chosen,</p> <p>15 correct?</p> <p>16 A. As I previously stated, we looked at</p> <p>17 samples that were treated and processed in the same</p> <p>18 batch as the sample that was sent to Histon with</p> <p>19 SEM and FTIR.</p> <p>20 Q. But not done for Sample No. 2?</p> <p>21 A. Sample No. 2 was part of the batch that</p> <p>22 was processed equally, sir. From the SEM and FTIR</p> <p>23 that we did, the spectra and the images showed</p> <p>24 similar features. It indicated that all of the</p> <p>25 samples that were processed in that batch were</p>

66 (Pages 258 to 261)

Stephanie Benight, Ph.D.

Page 262	Page 264
<p>1 similar.</p> <p>2 Q. The decision was made not to look at</p> <p>3 Sample No. 2 using FTIR or scanning electron</p> <p>4 microscopy, correct?</p> <p>5 A. Sample 2 was sent to Histon for</p> <p>6 processing, embedding, and staining.</p> <p>7 Q. Who made the decision not to do SEM</p> <p>8 analysis and FTIR analysis on Sample No. 2?</p> <p>9 A. I don't recall, sir.</p> <p>10 Q. You testified a couple moments ago that</p> <p>11 the Exhibit No. 8 and the other materials that you</p> <p>12 brought with you today were not provided to</p> <p>13 Dr. MacLean prior to issuing his expert report,</p> <p>14 correct?</p> <p>15 A. It's my understanding that those materials</p> <p>16 were not in his file. They were in my file.</p> <p>17 MR. HUTCHINSON: And Dan, I'm going to</p> <p>18 object to the extent that it's mischaracterization</p> <p>19 of the testimony. I think it was before</p> <p>20 Dr. MacLean's deposition that you are talking about.</p> <p>21 MR. THORNBURGH: That's not the way -- the</p> <p>22 transcript will speak for itself.</p> <p>23 MR. HUTCHINSON: Okay. Good. Thank you.</p> <p>24 MR. THORNBURGH: I have no further</p> <p>25 questions.</p>	<p>1 STATE OF CALIFORNIA)</p> <p>2 COUNTY OF YOLO)</p> <p>3 I, ELAINA BULDA-JONES, a Certified Shorthand</p> <p>4 Reporter of the State of California, duly authorized</p> <p>5 to administer oaths pursuant to Section 2025 of the</p> <p>6 California Code of Civil Procedure, do hereby</p> <p>7 certify that</p> <p>8 STEPHANIE BENIGHT, Ph.D.,</p> <p>9 the witness in the foregoing deposition, was by me</p> <p>10 duly sworn to testify the truth, the whole truth and</p> <p>11 nothing but the truth in the within-entitled cause;</p> <p>12 that said testimony of said witness was reported by</p> <p>13 me, a disinterested person, and was thereafter</p> <p>14 transcribed under my direction into typewriting and</p> <p>15 is a true and correct transcription of said</p> <p>16 proceedings.</p> <p>17 I further certify that I am not of counsel or</p> <p>18 attorney for either or any of the parties in the</p> <p>19 foregoing deposition and caption named, nor in any</p> <p>20 way interested in the outcome of the cause named in</p> <p>21 said deposition dated the _____ day of</p> <p>22 _____, 2015.</p> <p>23</p> <p>24</p> <p>25 ELAINA BULDA-JONES, CSR 11720</p>
Page 263	Page 265
<p>1 MR. HUTCHINSON: All right. We're going</p> <p>2 to take a quick break and we'll be back on the</p> <p>3 record in just a second.</p> <p>4 THE VIDEOGRAPHER: Off the record at 7:30.</p> <p>5 (Whereupon, the deposition was concluded</p> <p>6 at 7:30 p.m.)</p> <p>7</p> <p>8</p> <p>9</p> <p>10</p> <p>11</p> <p>12</p> <p>13</p> <p>14</p> <p>15</p> <p>16</p> <p>17</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>	<p>1 INSTRUCTIONS TO WITNESS</p> <p>2</p> <p>3 Please read your deposition</p> <p>4 over carefully and make any necessary</p> <p>5 corrections. You should state the reason</p> <p>6 in the appropriate space on the errata</p> <p>7 sheet for any corrections that are made.</p> <p>8 After doing so, please sign</p> <p>9 the errata sheet and date it. It will be</p> <p>10 attached to your deposition.</p> <p>11 It is imperative that you</p> <p>12 return the original errata sheet to the</p> <p>13 deposing attorney within thirty (30) days</p> <p>14 of receipt of the deposition transcript</p> <p>15 by you. If you fail to do so, the</p> <p>16 deposition transcript may be deemed to be</p> <p>17 accurate and may be used in court.</p> <p>18</p> <p>19</p> <p>20</p> <p>21</p> <p>22</p> <p>23</p> <p>24</p> <p>25</p>

67 (Pages 262 to 265)